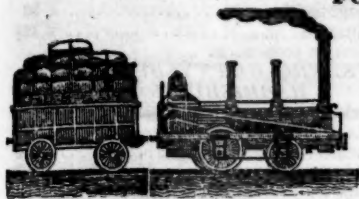
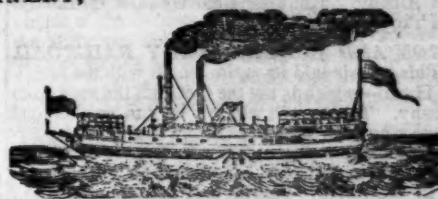


AMERICAN RAILROAD JOURNAL, AND GENERAL ADVERTISER

FOR RAILROADS, CANALS, STEAMBOATS, MACHINERY,
AND MINES.



ESTABLISHED 1831.



PUBLISHED WEEKLY, AT No. 23 CHAMBERS STREET, NEW YORK, AT FIVE DOLLARS PER ANNUM.

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SATURDAY, OCTOBER 3, 1846.

[WHOLE No. 537, Vol. XIX.

BOSTON AND PROVIDENCE RAILROAD.

Passenger Notice. Summer Arrangement. On and after Monday, April 6, 1846, the Pas-

senger Trains will run as follows:

For New York—Night Line, via Stonington.

Leaves Boston every day, but Sunday, at 5 p.m.

Accommodation Trains, leave Boston at 7½ a.m.

and 4 p.m., and Providence at 8 a.m. and 4½ p.m.

Dedham trains, leave Boston at 8 a.m. 12½ m.,

3½ p.m., and 6½ p.m. Leave Dedham at 7 a.m.

and 9½ a.m. and 2½ and 5½ p.m.

Stoughton trains, leave Boston at 11½ a.m. and

5½ p.m. Leave Stoughton at 7-20 a.m. and 3½ p.m.

All baggage at the risk of the owners thereof.

31 ly W. RAYMOND LEE, Sup't.

BRANCH RAILROAD AND STAGES CON-

necting with the Boston and Providence Railroad.

Stages connect with the Accommodation trains at

the Foxboro' Station, to and from Woonsocket. At

the Seekonk Station, to and from Lonsdale, R. I.

via Pawtucket. At the Sharon Station, to and from

Walpole, Mass. And at Dedham Village Station,

to and from Medford, via Medway, Mass. At Pro-

vidence, to and from Bristol, via Warren, R. I.—

Taunton, New Bedford and Fall River cars run in

connection with the accommodation trains.

NORWICH AND WORCESTER RAIL-

Road. Summer Arrangement, commencing

Monday, April 6, 1846.

Accommodation Trains, daily,

except Sunday. Leave Norwich, at 6 a.m., and 4½

p.m. Leave Worcester, at 10 a.m., and 4½ p.m.

The morning Accommodation Trains from

Norwich, and from Worcester, connect with the

trains of the Boston, and Worcester and Western

railroads each way.

The Evening Accommodation Train from Wor-

cester connects with the 1½ p.m. train from Boston.

New York Train via Long Island Railroad:

Leave Allyn's Point for Boston, about 1 p.m., dai-

ly, except Sunday.

Leave Worcester for New York, about 10 a.m.,

stopping at Webster, Danielsonville, and Norwich.

New York Train via Steamboat—Leave Nor-

wich for Boston, every morning, except Monday, on

the arrival of the steamboat from New York, stop-

ping at Norwich and Danielsonville.

Leave Worcester for New York, upon the arrival

of the train from Boston, at about 4½ p.m., daily, ex-

cept Sunday, stopping at Webster, Danielsonville

and Norwich.

Freight Trains daily each way, except Sunday.—

Special contracts will be made for cargoes, or large

quantities of freight, on application to the superinten-

dent.

Fares are Less when paid for Tickets than when

paid in the Cars. 39 ly J. W. STOWELL, Sup't.

BOSTON AND MAINE RAILROAD.

Upper Route, Boston to Portland via, Reading,

Andover, Haverhill, Exeter, Do-

ver, Great Falls, South & North

Berwick, Wells, Kennebunk and Saco.

Summer Arrangement, 1846.

On and after April 13, 1846, Passenger Trains

will leave daily, (Sundays excepted,) as follows:

Boston for Portland at 7½ a.m. and 2½ p.m.

Boston for Great Falls at 7½ a.m., 2½ and 4½ p.m.

Boston for Haverhill at 7½ and 11½ a.m., 2½, 4½ and

5 p.m.

Boston for Reading at 7½, 9, and 11½ a.m., 2½, 4½,

5 and 8 p.m.

Portland for Boston at 7½ a.m., and 3 p.m.

Great Falls for Boston at 6½ and 9½ a.m., and 4½

p.m.

Haverhill for Boston at 6½, 8½, and 11 a.m., and

4 and 6½ p.m.

Reading for Boston at 6½, 7½ and 9½ a.m., 12 m.,

1½, 5 and 7½ p.m.

The Depot in Boston is on Haymarket Square.

Passengers are not allowed to carry Baggage

above \$50 in value, and that personal Baggage,

unless notice is given, and an extra amount paid, at

the rate of the price of a Ticket for every \$500

additional value.

1y31 CHAS. MINOT, Super't.

NEW YORK & HARLEM RAILROAD

CO.—Summer Arrangement.

On and after Friday, May 1st, 1846,

the cars will run as follows:

Leave City Hall for Yorkville, Harlem and Mor-

rianna, at 7, 8, 9, 10 and 11 a. m., and at 1, 2, 3, 30,

4, 30, 5, 6, and 6 30 p. m.

Leave City Hall for Fordham and Williams'

Bridge, at 7, 10 and 11 a. m., and at 2, 3, 30, 5, and

6 30 p. m.

Leave City Hall for Hunt's Bridge, Bronx, Tuc-

kahoe, Hart's Corners and White Plains, at 7 and

10 a. m., and at 2 and 5 p. m.

Leave Harlem and Yorkville, at 7 10, 8 10, 9, 10,

11 10 a. m., and at 12 40, 2, 3 10, 5 10, 5 30, 6 10,

and 7 p. m.

Leave Williams' Bridge and Fordham, at 6 45,

7 45, and 10 45 a. m., and at 12 15, 2 45, 4 45, and

5 45 p. m.

Leave White Plains, at 7 and 10 a. m., and at 2

and 5 p. m.

The freight train will leave the City Hall at 1

o'clock, p. m., and leave White Plains at 1 o'clock

in the morning.

On Sundays, the White Plains train will leave the

City Hall at 7 a. m. and 5 30 p. m.; will leave

White Plains at 7 a. m. and 6 p. m.

On Sundays, the Harlem and Williams Bridge

trains will be regulated according to the state of the

weather. 1y18

SUMMER ARRANGEMENT.—NEW YORK

SAND ERIE RAILROAD LINE, from April

1st until further notice, will

run daily (Sundays except-

ed) between the city of New York and Middletown,

Goshen, and intermediate places, as follows:

FOR PASSENGERS—

Leave New York at 7 A. M. and 4 P. M.

" Middletown at 6½ A. M. and 5½ P. M.

FARE REDUCED to \$1 25 to Middletown—way in

proportion. Breakfast, supper and berths can be had

on the steamboat.

FOR FREIGHT—

Leave New York at 5 P. M.

" Middletown at 12 M.

The names of the consignee and of the station

where to be left, must be distinctly marked upon

each article shipped. Freight not received after 5

P. M. in New York.

Apply to J. F. Clarkson, agent, at office corner of

Duane and West sts. H. C. SEYMOUR, Sup't.

March 25th, 1846.

Stages run daily from Middletown, on the arrival

of the afternoon train, to Milford, Carbondale,

Honesdale, Montrose, Towanda, Owego, and West;

also to Monticello, Windsor, Binghamton, Ithaca,

etc., etc. Agent on board. 13 if

BOSTON AND ALBANY.—WESTERN

RAILROAD.—Fare Reduced.

1846.. Spring Arrangement.. 1846

Commencing April 1st.

Passenger trains leave daily, Sundays excepted—

Boston 7½ p. m. and 4 p. m. for Albany.

Albany 6½ " and 2½ " for Boston.

Springfield 7 " and 1 " for Albany.

Springfield 7 " and 1½ " for Boston.

Boston, Albany and Troy:

Leave Boston at 7½ a. m., arrive at Springfield at

12 m., dine, leave at 1 p. m., and reach Albany at

6½ p. m.

Leave Boston at 4 p. m., arrive at Springfield at 8

p. m., lodge, leave next morning at 7, and arrive at

Albany at 12½ m.

Leave Albany at 6½ a. m., arrive at Springfield at

½ m., dine, leave at 1½ p. m., and arrive at Boston

6½ p. m.

Leave Albany at 2½ p. m., arrive at Springfield at

8½ p. m., lodge, leave next morning at 7, and arrive at

Boston at 12 m.

The trains of the Troy and Greenbush railroad

connect with all the above trains at Greenbush.

Fare from Boston to Albany, \$5; fare from Spring-

field to Boston or Albany, \$2 75.

Merchandise trains run daily (Sundays excepted)

between Boston, Albany, Troy, Hudson, Northamp-

ton, Hartford, etc.

For further information apply to C. A. Read,

agent, 27 State street, Boston, or to S. Witt, agent,

Albany.

JAMES BARNES,

Superintendent and Engineer.

Western Railroad Office,

Springfield, April 1, 1846. } 14 ly

TROY RAILROADS.—IMPORTANT NOTICE.

Troy and Greenbush Railroad, forming a continuous track from Boston to Buffalo and Saratoga Springs. This road is new, and laid with the heaviest iron H rail. Trains will always be run on this road connecting at Greenbush each way with the trains to and from Boston and intermediate places, leaving Greenbush daily at 1½ p.m. and 6 p.m., or on arrival of the trains from Boston; leave Troy at 7½ a.m. and 4½ p.m., or to connect with trains to Boston.

Trains also run hourly on this road between Troy and Albany. Running time between Greenbush and Troy, 15 minutes.

TROY AND SCHENECTADY RAILROAD.

This road is laid its entire length with the heaviest H rail—which is not the fact with the road from Albany. Trains will always be run on this road connecting each way, to and from Buffalo and intermediate places. Leave Troy for Buffalo at 7½ a.m. and 1 p.m. and 6½ p.m., or to connect with the trains for the west; leave Schenectady at 2½ a.m., 8½ a.m., 1 p.m. and 3½ p.m., or on arrival of the trains from Buffalo and intermediate places.

TROY AND SARATOGA RAILROAD.
THE ONLY DIRECT ROUTE.

No change of passenger, baggage or other cars on this route. Cars leave Troy for Ballston, Saratoga Springs, Lake George and White Hall at 7½ a.m., (arriving one hour in advance of the train from Albany,) and at 3½ p.m. Returning, leave Saratoga at 9 a.m. and 3½ p.m., (reaching Troy in time for the evening boats to New York.) Cars also leave Troy for the Burrough at 3½ p.m. and 7 p.m., connecting with packet boats for the north. This takes passengers from New York and Boston to Montreal in 44 hours.

N.B. Travellers will find the routes through Troy most convenient and economical, and as expeditious as any other. The steamboats to and from New York land within a few steps of the railroad office, and passengers are taken up and landed by the different railroad lines at the doors of principal hotels, thus saving all necessity for, and annoyance from, hack drivers, cabmen, runners, etc.

Aug. 3, 1846.

1y 32

THE BEST RAILROAD ROUTE TO THE Lake and Buffalo, from Cincinnati.

Take Cars to Xenia, 65 miles; take Stage to Mansfield, 88 miles; thence by Cars to Sandusky, 56 miles to the Lake; thence Steamboat to Buffalo, 230 miles.

Fare from Cincinnati to Sandusky \$8 00
" " Sandusky to Buffalo, Cabin 6 00
" " " " Steerage 4 50

Fare by this route, although the cheapest across the state, will be reduced in a short time, railroad lengthened, and speed increased.

Leave Cincinnati in the morning, arrive at Columbus at night.

Leave Columbus in the morning, arrive at Sandusky same day.

Leave Sandusky, by Boat, in the morning, arrive at Buffalo next morning in time for the Cars north and east for Niagara Falls, Canada, Saratoga Springs, Troy, Albany, Boston, New York, Washington, or Philadelphia.

Passengers should not omit to pay their fare through from Cincinnati to Sandusky, or from Columbus to Sandusky via Mansfield; as this route is the only one that secures 56 miles [this road is run over in 2h. 50m.] most railroad which is new, and is the shortest, cheapest and most expeditious across the state.

Fares on the New York railroads are about to be reduced.

B. HIGGINS, Sup't, etc.
M. & S. C. R. R. Co.

Sandusky, Ohio.

RAILROAD IRON.—THE "MONTGOMERY" Iron Company, Danville, Pa., is prepared to execute orders for the heavy Rail Bars of any pattern now in use, in this country or in Europe, and equal in every respect in point of quality. Apply to **MURDOCK, LEAVITT & CO.,** Agents.

Corner of Cedar and Greenwich Sts. 48 1y

NEW RAILROAD ROUTE FROM BUFFALO to Cincinnati.

Passengers destined for Columbus and Cincinnati, O., Louisville, Ky., St. Louis, Mo., Memphis, Tenn., Vicksburg, Natches, New Orleans, and all intermediate ports, will find a new, and the most expeditious and comfortable Route, by taking Steamboats at Buffalo, landing at Sandusky City, Ohio, distance 230 miles.

From thence by Cars, over the Mansfield Railroad which is new and just opened [laid with heavy iron] to Mansfield, distance 56 "

Thence by Stage via Columbus to Xenia over gravel and Macadamized Road, (the best in the state,) in new coaches, distance 88 "

Thence, over the Little Miami Railroad, from Xenia to Cincinnati, distance 65 "

TIME.
From Buffalo to Sandusky 24 hours.
Leave Sandusky 5 a.m. to Columbus 14 "
From Columbus to Cincinnati 15 "

Or say 30 hours from Sandusky to Cincinnati over this route, including delays.

FARE.
From Buffalo to Sandusky, Cabin \$6 00
" " " " Steerage 3 00
" Sandusky to Columbus 4 50
" " through to Cincinnati 8 00

Passengers should not omit to pay their fare through from Sandusky City to Cincinnati and take receipts availing themselves of the benefit of a contract existing between the said Railroad and Stage Co's, securing 121 miles travel by good Railroad and 88 miles by Stage, in crossing from Lake Erie to the Ohio river, in the space of 30 hours.

Passengers destined for St. Louis, or any point below on the Mississippi, will save by taking this route, from 4 to 6 days time and travel, and nearly half the expense, over the Chicago and Peoria route to the above places.

Fare by this route, although the cheapest, will in a short time be reduced, Railroad lengthened, and speed increased.

B. HIGGINS, Sup't, etc.
M. & S. C. R. R. Co.

Sandusky City, Ohio.

BALTIMORE AND OHIO RAILROAD.
MAIN STEM. The Train carrying the Great Western Mail leaves Bal-

timore every morning at 7½ and 12½ a.m. Cumberland at 8 o'clock, passing Ellicott's Mills, Frederick, Harpers Ferry, Martinsburgh and Hancock, connecting daily each way with the Washington Trains at the Relay House seven miles from Baltimore, with the Winchester Trains at Harpers Ferry—with the various railroad and steamboat lines between Baltimore and Philadelphia and with the lines of Post Coaches between Cumberland and Wheeling and the fine Steamboats on the Monongahela Slack Water between Brownsville and Pittsburgh. Time of arrival at both Cumberland and Baltimore 5½ P. M. Fare between those points \$7, and 4 cents per mile for less distances. Fare through to Wheeling \$11 and time about 36 hours, to Pittsburgh \$10, and time about 32 hours. Through tickets from Philadelphia to Wheeling \$13, to Pittsburgh \$12. Extra train daily except Sundays from Baltimore to Frederick at 4 P. M., and from Frederick to Baltimore at 8 A. M.

WASHINGTON BRANCH.

Daily trains at 9 A. M. and 5 P. M. and 12 at night from Baltimore and at 6 A. M. and 5½ P. M. from Washington, connecting daily with the lines North, South and West, at Baltimore, Washington and the Relay house. Fare \$1 60 through between Baltimore and Washington, in either direction, 4 cents per mile for intermediate distances. 13y1

THE SUBSCRIBER IS PREPARED TO execute at the Trenton Iron Works, orders for Railroad Iron of any required pattern, and warranted equal in every respect in point of quality to the best American or imported Raile. Also on hand and made to order, Bar Iron, Braziers' and Wire Rods, etc., etc.

PETER COOPER, 17 Burling Slip.
New York.**BALTIMORE AND SUSQUEHANNA Railroad.—Reduction of Fare.**

Morning and Afternoon Trains between Baltimore and York.—The Passenger trains run daily, except Sunday, as follows:

Leaves Baltimore at 9 a.m. and 3½ p.m.
Arrives at 9 a.m. and 6½ p.m.
Leaves York at 5 a.m. and 3 p.m.
Arrives at 12½ p.m. and 8 p.m.
Leaves York for Columbia at 1½ p.m. and 8 a.m.
Leaves Columbia for York at 8 a.m. and 2 p.m.

FARE.

Fare to York \$1 50
" Wrightsville 2 00
" Columbia 2 12½

Way points in proportion.

PITTSBURG, GETTYSBURG AND HARRISBURG.

Through tickets to Pittsburgh via stage to Harrisburg \$9
Or via Lancaster by railroad 10
Through tickets to Harrisburg or Gettysburg. 3
In connection with the afternoon train at 3½ o'clock, a horse car is run to Green Spring and Owings' Mill, arriving at the Mills at 5½ p.m.
Returning, leaves Owings' Mills at 7 a.m.

D. C. H. BORDLEY, Sup't.

31 1y Ticket Office, 63 North st.

LEXINGTON AND OHIO RAILROAD.

Trains leave Lexington for Frankfort daily, at 5 o'clock a.m., and 2 p.m.

Trains leave Frankfort for Lexington daily, at 8 o'clock a.m. and 2 p.m. Distance, 28 miles. Fare \$1.25.

On Sunday but one train, 5 o'clock a.m. from Lexington, and 2 o'clock p.m. from Frankfort.

The winter arrangement (after 15th September to 15th March) is 6 o'clock a.m. from Lexington, and ma. 9. from Frankfort, other hours as above.

35 1y

SOUTH CAROLINA RAILROAD.—A

Passenger Train runs daily from Charleston, on the arrival of the boats from

Wilmington, N. C., in connection with trains on the Georgia, and Western and Atlantic Railroads—and by stage lines and steamers connects with the Montgomery and West Point, and the Tusculum Railroad in N. Alabama.

Fare through from Charleston to Montgomery daily \$26 50

Fare through from Charleston to Huntsville, Decatur and Tusculum 22 00

The South Carolina Railroad Co. engage to receive merchandise consigned to their order, and to forward the same to any point on their road; and to the different stations on the Georgia and Western and Atlantic railroad; and to Montgomery, Ala., by the West Point and Montgomery Railroad.

JOHN KING, Jr., Agent.

CENTRAL RAILROAD—FROM SAVANNAH to Macon.

Distance 190 miles.

This Road is open for the transportation of Passengers and Freight.

Rates of Passage, \$8 00. Freight—On weight goods generally... 50 cts. per hundred.

On measurement goods 13 cts. per cubic ft.

On brls. wet (except molasses and oil) \$1 50 per barrel.

On brls. dry (except lime) 80 cts. per barrel.

On iron in pigs or bars, castings for mills, and unboxed machinery 40 cts. per hundred.

On hhd. and pipes of liquor, not over 120 gallons \$5 00 per hhd.

On molasses and oil \$6 00 per hhd.

Goods addressed to F. WINTER, Agent, forwarded free of commission. THOMAS PURSE, Gen'l. Sup't. Transportation.

MANUFACTURE OF PATENT WIRE

Rope and Cables for Inclined Planes, Scaffolding Ship Rigging, Mines, Cranes, Tillers etc., by JOHN A. ROEBLING, Civil Engineer, Pittsburgh, Pa.

These Ropes are in successful operation on the planes of the Portage Railroad in Pennsylvania, on the Public Slips, on Ferries and in Mines. The first rope put upon Plane No. 3, Portage Railroad, has now run 4 seasons, and is still in good condition.

2v19 1y

CENTRAL AND MACON AND WESTERN RAILROADS, GA.—These Roads with the Western and Atlantic Railroad of the State of Georgia, form a continuous line from Savannah to Oothcaloga, Ga., of 371 miles, viz:

Savannah to Macon—Central Railroad 190
Macon to Atlanta—Macon and Western 101
Atlanta to Oothcaloga—Western and Atlantic 80

Goods will be carried from Savannah to Atlanta and Oothcaloga, at the following rates, viz:

	Miles.	To Atlanta.	To Oothcaloga.
On Weight Goods—Sugar, Coffee, Liquor, Bagging, Rope, Butter, Cheese, Tobacco, Leather, Hides, Cotton Yarns, Copper, Tin, Bar & Sheet Iron, Hollow Ware & Castings.....	\$0 50	\$0 75	
Flour, Rice, Bacon in Casks or boxes, Pork, Beef, Fish, Lard, Tallow, Beeswax, Mill Gearing, Pig Iron and Grind Stones.....	0 50	0 62½	
On Measurement Goods—Boxes of Hats, Bonnets and Furniture, per cubic foot.....	0 20	0 26	
Boxes and Bales of Dry Goods, Saddlery, Glass, Paints, Drugs and Confectionary, per cubic foot.....	0 20	pr. 100 lbs. 35	
Crockery, per cubic foot.....	0 15	" 35	
Molasses and Oil, per hhd., (smaller casks in proportion).....	9 00	12 50	
Ploughs, (large,) Cultivators, Corn Shellers, and Straw Cutters, each.....	1 25	1 50	
Ploughs, (small,) and Wheelbarrows.....	0 80	1 05	
Salt, per Liverpool Sack.....	0 70	0 95	
Passage—Savannah to Atlanta, \$10; Children, under 12 years of age, half price, Savannah to Macon, \$7.			

Goods consigned to the subscriber will be forwarded free of Commissions.

Freight may be paid at Savannah, Atlanta or Oothcaloga.

F. WINTER, Forwarding Agent, C. R. R.
Savannah, Aug. 15th, 1846. 1y34

LITTLE MIAMI RAILROAD.—1846.—

Summer Arrangement.

Two passenger trains daily.

On and after Tuesday, May 5th, until further notice, two passenger trains will be run—leaving Cincinnati daily (Sundays excepted) at 9 a.m. and 1½ p.m. Returning, will leave Xenia at 5 o'clock 50 min. a.m., and 2 o'clock 40 min. p.m.

On Sundays, but one train will be run—leaving Cincinnati at 9, and Xenia at 5 50 min. a.m.

Both trains connect with Neil, Moore & Co.'s daily line of stages to Columbus, Zanesville, Wheeling, Cleveland, Sandusky City and Springfield.

Tickets may be procured at the depot on East Front street.

The company will not be responsible for baggage beyond fifty dollars in value, unless the same is returned to the conductor or agent, and freight paid at the rate of a passage for every \$500 in value above that amount.

W. H. CLEMENT,
Superintendent. 19

GREAT SOUTHERN MAIL LINE! VIA Washington city, Richmond, Petersburg, Weldon and Charleston, S. C., direct to New Orleans. The only Line which carries the Great Southern Mail, and Twenty-four Hours in advance of Bay Line, leaving Baltimore same day.

Passengers leaving New York at 4½ P.M., Philadelphia at 10 P.M., and Baltimore at 6½ A.M., proceed without delay at any point, by this line, reaching Richmond in eleven, Petersburg in thirteen and a half hours, and Charleston, S. C., in two days from Baltimore.

Fare from Baltimore to Charleston.....\$21 00
" " " Richmond..... 6 60

For Tickets, or further information, apply at the Southern Ticket Office, adjoining the Washington Railroad Office, Pratt street, Baltimore, to
1y14 STOCTON & FALLS, Agents.

GEORGIA RAILROAD. FROM AUGUSTA to ATLANTA—171 MILES.

AND WESTERN AND ATLANTIC RAILROAD FROM ATLANTA to OOTHCALOGA, 80 MILES.
This Road in connection with the South Carolina Railroad and Western and Atlantic Railroad now forms a continuous line, 388 miles in length, from Charleston to Oothcaloga on the Oostenaula River, in Cass Co., Georgia.

RATES OF FREIGHT.		Between Augusta and Oothcaloga, 250 miles.	Between Charleston and Oothcaloga, 386 miles.
1st class.	Boxes of Hats, Bonnets, and Furniture, per cubic foot.....	\$0 16	\$0 25
2d class.	Boxes and Bales of Dry Goods, Sadlery, Glass, Paints, Drugs and Confectionary, per 100 lbs.	0 90	1 40
3d class.	Sugar, Coffee, Liquor, Bagging, Rope, Cotton Yarns, Tobacco, Leather, Hides, Copper, Tin, Bar and Sheet Iron, Hollow Ware, Castings, Crockery, etc.	0 55	0 80
4th class.	Flour, Rice, Bacon, Pork, Beef, Fish, Lard, Tallow, Beeswax, Feathers, Ginseng, Mill Gearing, Pig Iron, and Grindstones, etc.	0 37½	0 62½
	Cotton, per 100 lbs.....	0 45	0 65
	Molasses, per hogshead.....	8 50	
	" " barrel.....	2 00	
	Salt per bushel.....	0 17	
	Ploughs, Corn Shellers, Cultivators, Straw Cutters, Wheelbarrows.....	0 75	

German or other emigrants, in lots of 20 or more, will be carried over the above roads at 2 cents per mile.

Goods consigned to S. C. Railroad Co. will be forwarded free of commissions. Freight may be paid at Augusta, Atlanta, or Oothcaloga.

J. EDGAR THOMSON,
Ch. Eng. and Gen. Agent.
Augusta, Sept. 2th, 1845 *44 1y

THE WESTERN AND ATLANTIC Railroad.—This Road is now in operation to Oothcaloga, a distance of 80 miles, and connects daily (Sundays excepted) with the Georgia Railroad.

From Kingston, on this road, there is a tri-weekly line of stages, which leave on the arrival of the cars on Tuesday, Thursday and Saturday, for Warrenton, Huntsville, Decatur and Tusculumbia, Alabama, and Memphis, Tennessee.

On the same days, the stages leave Oothcaloga for Chattanooga, Jasper, Murfreesborough, Knoxville and Nashville, Tennessee.

This is the most expeditious route from the east to any of these places.

CHAS. F. M. GARNETT,
Chief Engineer.
Atlanta, Georgia, April 16th, 1846. 1y1

MARAMEC IRON WORKS FOR SALE.

By Authority of a power of Attorney from Messrs. Massey and James, I will sell at Public Auction, at the Court House in the city of St. Louis, on MONDAY, the 2nd day of November next, the above named valuable IRON WORKS—together with 8,000 ACRES OF LAND, more or less, on which there are several valuable and productive Farms open and in cultivation.

The Maramec Iron Works are situated at the Maramec Big Spring, in Crawford Co., Mo., and consist of 1 BLAST FURNACE; 1 AIR FURNACE; 1 REFINING FORGE, with large Hammer for making Blooms and Anchovies;

2 CHEFFERY FORGES for Drawing Bar Iron; 1 ROLLING MILL for Rolling Blooms into Bars and Plates;

1 SAW AND 1 GRIST MILL,

All within 300 Yards of the head of the spring. There are 2 large frame Coal Houses, and all other Buildings necessary, such as Shops and Houses for the workmen.

This Spring is one of the largest in Missouri, discharging at the lowest time 7,000 cubic feet of water per minute. The Ore Bank from which the Ore has been heretofore taken is about 600 yards from the furnace; it is the Specular Iron Ore, the best for making Bar Iron, and the quantity inexhaustible.—It is an Iron Mountain, 400 feet above the level of the Maramec River; the ore is entirely uncovered, and there is an easy descent and a good road from it to the furnace.

The lands have been carefully selected by one of the owners with a view to the interest and convenience of the Works, and are situated principally on the Maramec River and its tributaries, embracing the best bottom lands and water powers. The following detached tracts, comprized in the above quantity, were selected for the advantages they possess;

183½ ACRES in T. 40 N. of R. 8 W. in Sec. 3, near Wherry's Mill, in Osage Co.; entered to secure a very valuable Mill power on the Branch Spring and a good landing on the Gasconade River.

80 ACRES on Benton's Creek, 12 miles from the Works; entered to secure an extensive and valuable Ore Bank 2½ miles from the Maramec, at a point where there is ample water power.

320 ACRES in T. 38 N. of R. 4 W. in Sec. 23 and 28, affording an extensive and valuable water power on the Maramec river.

160 ACRES in T. 37 N. of R. 3 W. in Sec. 4, embraces two inexhaustible and valuable Ore Banks and is 1½ miles from Water power sufficient for a furnace and Grist Mill, and is distant 6 miles from the above site on the Maramec.

80 ACRES in T. 37 N. of R. 8 W. in Sec. 33, including an extensive bank of excellent Ore, and distant 1½ miles from water power on the waters of the Gasconade River, in Pulaski Co., sufficient for Furnace and Mills. All those Banks are of the same kind as the one at the Works, and deemed inexhaustible.

1 LOT, containing nearly one Acre, on the South Bank of the Missouri River, 4 Miles above the town of Hermann, purchased for a warehouse and landing, and is one of the best landings on the River.

The lands above described are well timbered, and have been selected with a view to have an ample supply of wood and coal, for fences, building and other purposes. There are on the land valuable quarries of Limestone well adapted for Fluxes for the Ore, and also good quarries of Rock suitable for building. There are also on the land a great number the finest kind of Springs. A large portion of the lands are bottoms well adapted to the production of Corn and other crops. The Works are situated in a very pleasant and healthful part of the country. The Maramec ore is believed to be admirably adapted to the manufacture of steel.

A further description of the property at this time is considered unnecessary, as those wishing to purchase will no doubt view the property, which will be shown by the Agent, residing at the works.

The terms of payment required will be one-third of the purchase money in hand and the balance in three equal annual payments, secured by mortgage on all the property.

A more particular description of the property will be given, and further conditions of the sale made known, on the day of sale.

JNO. F. ARMSTRONG, Agent.
St. Louis, June 6, 1846.

The Louisville, (Ky.,) Journal, Cincinnati Gazette, Tribune (Portsmouth, O.,) Nashville Whig, Pittsburg Gazette, National Intelligencer, United States Gazette, (Phila.) Railroad Journal (N. Y.,) and Boston Atlas, will publish the above once a week until the 20th day of October next, and send bills to this office for settlement, and mark price on first paper. 1825

BACK VOLUMES OF THE RAILROAD JOURNAL for sale at the office, No. 23 Chambers street

GEORGE VAIL & CO., SPEEDWELL IRON Works, Morristown, Morris Co., N. J.—Manufacturers of Railroad Machinery; Wrought Iron Tires, made from the best iron, either hammered or rolled, from 1½ in. to 2½ in thick.—bored and turned outside if required. Railroad Companies wishing to order, will please give the exact inside diameter, or circumference, to which they wish the Tires made, and they may rely upon being served according to order, and also punctually, as a large quantity of the straight bar is kept constantly on hand.—Crank Axles, made from the best refined iron; Straight Axles, for Outside Connection Engines; Wrought Iron Engine and Truck Frames; Railroad Jack Screws; Railroad Pumping and Sawing Machines, to be driven by the Locomotive; Stationary Steam Engines; Wrought Iron work for Steamboats, and Shafting of any size; Grist Mill, Saw Mill and Paper Mill Machinery; Mill Gearing and Mill Wright work of all kinds; Steam Saw Mills of simple and economical construction, and very effective Iron and Brass Castings of all descriptions. 1y1

VALUABLE PROPERTY ON THE MILL Dam For Sale. A lot of land on Gravelly Point, so called, on the Mill Dam, in Roxbury, fronting on and east of Parker street, containing 68,497 square feet, with the following buildings thereon standing.

Main brick building, 120 feet long, by 46 ft wide, two stories high. A machine shop, 47x43 feet, with large engine, face, screw, and other lathes, suitable to do any kind of work.

Pattern shop, 35x32 ft. with lathes, work benches, Work shop, 86x35 feet, on the same floor with the pattern shop.

Forge shop, 118 feet long by 44 feet wide on the ground floor, with two large water wheels, each 16 feet long, 9 ft diameter, with all the gearing, shafts, drums, pulleys, &c., large and small trip hammers, furnaces, forges, rolling mill, with large balance wheel and a large blowing apparatus for the foundry.

Foundry, at end of main brick building, 60x45½ feet two stories high, with a shed part 45½x20 feet, containing a large air furnace, cupola, crane and corn oven.

Store house—a range of buildings for storage, etc., 200 feet long by 20 wide.

Locomotive shop, adjoining main building, fronting on Parker street, 54x25 feet.

Also—A lot of land on the canal, west side of Parker st., containing 6000 feet, with the following buildings thereon standing:

Boiler house 50 feet long by 30 feet wide, two stories.

Blacksmith shop, 49 feet long by 20 feet wide.

For terms, apply to HENRY ANDREWS, 4 State st., or to CURTIS, LEAVENS & CO., 106 State st., Boston, or to A. & G. RALSTON & Co., Philadelphia. ja4

THE NEWCASTLE MANUFACTURING Company continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention. ANDREW C. GRAY, a45 President of the Newcastle Manuf. Co.

NEW YORK AND ERIE RAILROAD Company Notice. The Stockholders of the New York and Erie Railroad Company are hereby notified, that the annual election for Directors of the company will be held at the office, No. 45 Wall st., in the city of New York, on Tuesday, the 15th day of October next, from 10 o'clock, A.M., to 3 o'clock, P.M.

The Transfer Books will be closed from the 22d of September until the day after the election.

By order of the Board of Directors,
NATHANIEL MARSH, Secretary.
New York, September 12, 1846. 4138

CUSHMAN'S COMPOUND IRON RAILS etc. The Subscriber having made important improvements in the construction of rails, mode of guarding against accidents from insecure joints, etc.—respectfully offers to dispose of Company, State Rights, etc., under the privileges of letters patent to Railroad Companies, Iron Founders, and others interested in the works to which the same relate. Companies reconstructing their tracks now have an opportunity of improving their roads on terms very advantageous to the varied interests connected with their construction and operation; roads having in use flat bar rails are particularly interested, as such are permanently available by the plan.

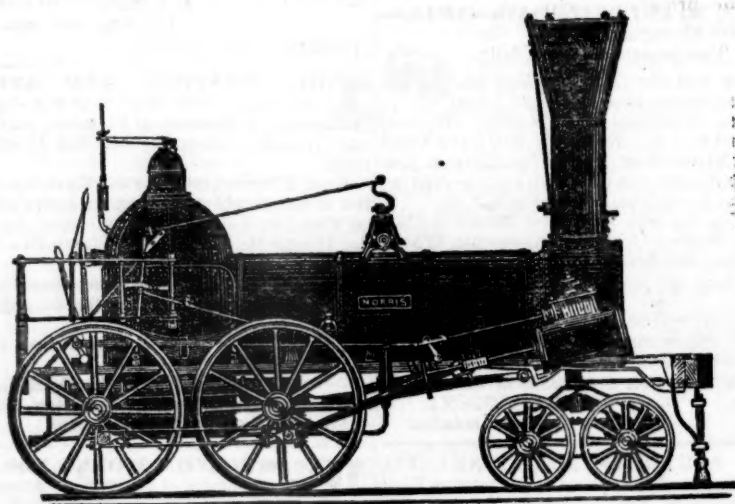
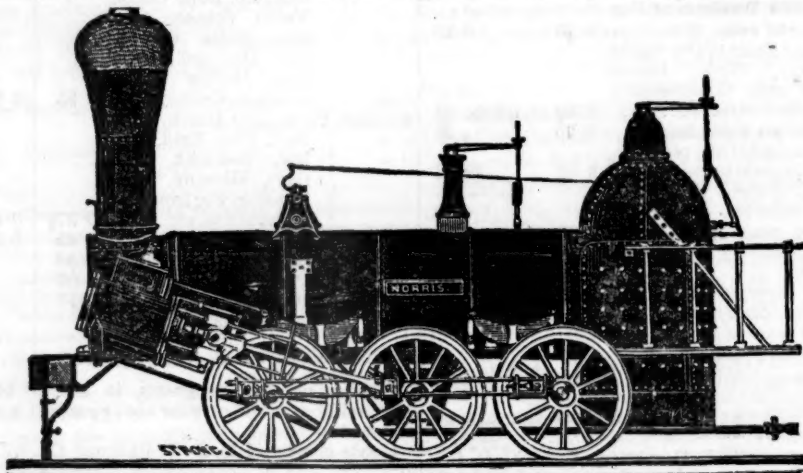
W. Mc. C. CUSHMAN, Civil Engineer,
Albany, N. Y.

Mr. C. also announces that Railroads, and other works pertaining to the profession, may be constructed under his advice or personal supervision. Applications must be post paid.

KEARNEY FIRE BRICK. F. W. BRINLEY, Manufacturer, Perth Amboy, N. J. Guaranteed equal to any, either domestic or foreign. Any shape or size made to order. Terms, 4 mos. from delivery of brick on board. Refer to

James P. Allaire, }
Peter Cooper, } New York.
Murdoch, Leavitt & Co. }
J. Triplett & Son, Richmond, Va.
J. R. Anderson, Tredgar Iron Works, Richmond, Va.
J. Patton, Jr. } Philadelphia, Pa.
Colwell & Co. }
J. M. L. & W. H. Scovill, Waterbury, Con.
N. E. Screw Co. } Providence, R. I.
Eagle Screw Co. }
William Parker, Supt. Bost. and Worc. R. R.
New Jersey Malleable Iron Co., Newark, N. J.
Gardiner, Harrison & Co. Newark, N. J.
25,000 to 30,000 made weekly. 35 1y

NORRIS' LOCOMOTIVE WORKS. BUSH HILL, PHILADELPHIA, Pennsylvania.



MANUFACTURE their Patent 6 Wheel Combined and 8 Wheel Locomotives of the following descriptions, viz:

Class	1,	15 inches Diameter of Cylinder,	× 20 inches Stroke.
"	2,	14	" " " × 24 " "
"	3,	14½	" " " × 20 " "
"	4,	12½	" " " × 20 " "
"	5,	11½	" " " × 20 " "
"	6,	10½	" " " × 18 " "

With Wheels of any dimensions, with their Patent Arrangement for Variable Expansion. Castings of all kinds made to order: and they call attention to their Chilled Wheels, for the Trucks of Locomotives, Tenders and Cars

NORRIS, BROTHERS.

Cumberland Road.

The Baltimore Patriot of Tuesday gives this explanation in reference to the detentions and irregularities which have latterly occurred upon the Baltimore and Ohio railroad.

The occasional delay in the arrival of the cars at Cumberland is caused, so we learn, by the detention which sometimes necessarily takes place between Baltimore and Harper's Ferry, where, as is known, new rails are being put down. It will sometimes happen, despite every precaution, that the engine is retarded for a short time from this cause. But the work of relaying the road, with a new and massive rail, will be completed in a short time, and then all cause of complaint will cease, or all excuses for delay be taken away.

The travel over the road this summer has been unprecedentedly large, and the amount of freight carried greater than any one could have anticipated. These things may have contributed to the delay complained of, but these will also be remedied in a short time, as the company have now making several locomotives of very great power.

That the stages occasionally fail in their time, is to be ascribed to the exceeding heat of summer, which, so we learn, has been such, on several days, as to render it impossible for horses to come up to the time required. But every effort is made to take the passengers through in the time fixed, and we understand that it is almost always done. Still, if more energy is wanting, the stage proprietors should see that it is given.

That this great central route between the east and the west is the best, is proven by the popularity which it has established for itself, and by the preference which is given to it over all others by travellers. We believe it deserves this popularity; and when the new rails are placed on the road between this city and Harper's Ferry, making the entire line of railroad from Baltimore to Cumberland equal to any in the country, the passage will be made to Cumberland, and thence to Wheeling, in much shorter time than even now. We understand, indeed, that it is intended by the proper authorities, in a short time, to make a thorough examination of the whole route hence to Wheeling, and that whatever is found to be wrong, to contribute to delay, or cause dissatisfaction to the travellers, will be inquired into and remedied as far as it can be.

Georgia Railroad and Banking Company. Annual Report.

The following reports of the president and engineer of the Georgia Railroad and Banking company has been some time in hand, and its appearance in the Journal quite too long delayed.

We have long considered the people of Georgia entitled to high praise for their enterprize and energy in the prosecution of their important works of intercommunication. They have persevered, through great difficulties, until their work is completed; and a connection formed with the state road, which now extends nearly to the Tennessee river.

These two roads, together with the Charleston and Augusta road, form a continuous line of 415 miles, besides branches. When the State road shall be completed to the Tennessee line, and the road from

thence to Nashville, be—as it must certainly soon be—constructed, and the contemplated connection with the Montgomery [Ala.] road made, then will this company begin to reap the rich returns for which they have labored, and which they so eminently deserve.

By a reference to the president's report, it will be seen that the net earnings were, during the past year, equal to 6½ per cent., even though a portion of the road was in use only a part of the year.

We also regret that the Rome branch has not progressed as was anticipated, and trust that measures will soon be taken to "revive and complete that enterprize." It is too important a link in the great work of southwestern railroads to remain in an unfinished state.

There is also another branch, the Hixson road to Knoxville, long since nearly graded, which must also be again taken hold of and completed. We shall not cease to urge on these works whenever an opportunity presents of referring to them.

PRESIDENT'S REPORT.**To the Stockholders of the Georgia Railroad and Banking Company:**

A statement of the cashier, hereunto annexed, will show the financial condition of the company, at the end of the last fiscal year; and the report of the chief engineer, herewith presented, exhibits in a clear and satisfactory manner, the condition and management of the road, up to the same period.

For obvious reasons, the operations of the bank have been very small during the past year. Though the institution possesses great strength from its valuable property in the road, its banking capital is small, and the heavy and uncertain draughts upon it for the construction of the road, have been inconsistent with an extended banking business. Besides furnishing, however, a depository for the safe keeping and management of our finances, it is believed that this branch of the institution has, at least, paid the expenses of its management; and as the road is now finished, and the cost of construction almost entirely liquidated, our banking operations may be considerably extended with safety and profit.

By the statement of the engineer it will be seen that the net profits of the road for the last year are.....\$179,137 85

For the same time the interest paid was.....\$56,773 56

Reduced by interest, discount, etc., received.....36,154 38

Balance of interest.....20,619 18

Add bank salaries, taxes and incidentals.....10,155 23 30,774 40

Leaving net.....\$148,363 45

Or about 6½ per cent on the capital stock after deducting interest and all other expenses properly chargeable against both bank and road. As the crops of both cotton and provisions, in that part of Georgia on which our road has heretofore mainly depended for support, have been uncommonly short—and 42 miles of the road were in use only half the year—this result is very favorable, and could only have been secured by the extension of the road, which was completed in September last.

The bearings of trade and travel in refer-

ence to our improvement, have been fully discussed in previous reports, and are too well understood by the stockholders to require further notice here. Though the company has not the surplus means of its own, to embark further in railroad enterprize, the stockholders feel a deep interest in the progress of such connecting improvements as must increase its business and enlarge the field of its operations. The State road has already progressed to a point near the Oostenaulla, and sufficient means have been provided by the state to carry it to Cross Plains without any unnecessary delay. The progress of this road has already been marked by important changes in the business relations of the west, and when it reaches Cross Plains (fifteen miles from the Tennessee line,) a very large amount of trade and travel must leave their accustomed channels and turn to the South Atlantic coast. Should the State road be completed to Chattanooga, and the recently chartered road from that place to Nashville be built, the value of the business can scarcely be estimated, which would seek the shortest outlet through the ports of Georgia and Carolina.

The short but important branch from the State road to Rome, has not progressed as anticipated in a former report. This is the more to be regretted, as an enterprising individual has, during the past winter, navigated the Coosa river, between Rome and the Ten Islands, with entire success; and the completion of this short road would divert the trade of the entire valley of the Coosa, and a large portion of North Alabama. The directors have understood that efforts are now making to revive the enterprize, with strong hopes of success.

Important to our road as are the connecting improvements already named, those to the southwest of our terminus are perhaps equally so. Deeply impressed with the importance of an early completion of the Montgomery and West Point railroad, the directors recently agreed to guarantee the bonds of that company, for one hundred and twenty-five thousand dollars, to accomplish that desirable object. The board was not unmindful that the credit of the company should be pledged with great caution for any purposes whatever. But deeming the object very important, and the security against loss entirely ample, the guaranty was pledged on certain conditions, which, together with the measure itself, are respectfully submitted to the consideration of the convention.

The directors are now enabled to congratulate the stockholders on the final completion of their enterprize. A connection with the State road, at Atlanta, was made in September last, and a heavy and expensive increase in accommodations and outfit for an enlarged business, has also been made. Our investment will now assume more of a fixed and settled character. As the road and outfit have cost about one million more than the capital stock, a debt for a part of that amount has been necessarily contracted. The finances of the company have, however, been greatly simplified, and its liabilities are under

easy control. A sinking fund from a portion of the net profits should be regularly applied to a reduction of the debt, while the convenience of many of the stockholders will be best consulted by dividends of the remainder. This policy has been already indicated by the payment of \$80,000 of the 8 per cent. debt, during the past year, and a dividend of two dollars per share to the stockholders, in January last. JOHN P. KING, *Pres't.*

Having given the report of the president, we now give that of the engineer, J. EDGAR THOMPSON, Esq., who is probably entitled to at least as much credit for the completion of this important work as any other man. He has been connected with it, we believe, from the first surveys; and has given to it his constant and untiring efforts, until he has the satisfaction of seeing the work, not only in successful operation, but also yielding, even now in its infancy, a fair return upon its cost. He also has the satisfaction of knowing that he has accomplished as much work—as great an extent of road for an equal amount of money as any other engineer. He has acquired a reputation of which he may well feel proud: and we trust that he has been equally successful in his pecuniary affairs.

In closing his report, Mr. Thompson intimates that his connection with the company is about to terminate. There is but one reason that he could assign, satisfactory to us, for such a step—and that is, that he may take charge of, and carry through at an early day, the road from the Tennessee river to Nashville. If he has this in view, we cheerfully give our assent to the measure—and bid him God-speed; as we shall then feel quite sure that that important work will be accomplished, to the great advantage of the Georgia railroads, as well as to that of the people of Nashville and Tennessee.

We give these reports entire, as we have heretofore done, that we may hereafter have them to refer to, by way of showing the increase of business on the line, and the advantages of railroads to an agricultural country. Our pages will show that we have devoted large space to this work, and given high commendation to its management. Yet we have fallen under the severe *reproof* (?) of its presiding officer, for having spoken, as he thinks, too favorably of another—and in some respects a rival-work. As to the justice, propriety and good taste of such a course, on his part, we shall, at an early day, give the readers of the Journal an opportunity to judge.

We shall always speak freely—certainly it is our aim to speak candidly and justly, but without fear or favor—in relation to railroads and their management. We may be misled, but we shall not rest silently under such reproof, even if we are requested to take it quietly and say nothing about it.

ENGINEER'S REPORT.

To the Honorable John P. King, President of the Georgia Railroad and Banking Company:

SIR: I have the gratification to report to the board, that the several lines of road which the company have contemplated building, are now in successful operation, embracing together 213 miles of railway, of which there are 171 miles upon the main line between Augusta and Atlanta.

That portion of the road, unfinished at the date of my last annual report, was opened for use early in September, the period pro-

mised for its completion, at the commencement of the extension beyond Madsion. The cost of the new road has fallen considerably within the estimate submitted to the stockholders before its extension was undertaken. Up to this period the disbursements have been as follows:

Graduation	\$262,801 82
Culverts.....	14,930 73

Bridges. Ft. high. Ft. long.	
Alcovy river... 75... 1,400..	\$20,157 82
Cornish creek... 55... 720..	5,818 79
Wood's mill... 65... 428..	4,717 95
Dried Indian... 44... 900..	4,476 05
Turkey creek... 36... 360..	1,686 47
Yellow river... 67... 485..	11,532 02
Sundry small bridges.....	2,241 27

Mud sills.....	20,548 81
Cross ties.....	24,521 59
Stringers.....	28,102 91
Iron, including duty.....	271,548 43
Iron chairs.....	11,646 74
Spikes and bolts.....	15,232 59
Laying superstructure.....	32,697 79

Extension of Augusta warehouse, and building offices.	3,830 65
New foundry and stationary engine house.....	2,010 62
Depots and division houses on road.....	3,270 84
Engineering.....	23,434 76
Rod, chain and axemen.....	2,092 20
Wells, pumps, tanks, etc.....	2,045 98
Right of way.....	18,810 48
Real estate.....	11,365 81
Miscellaneous items.....	3,128 78

Amount.....	\$802,651 90
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In addition to this sum I have advanced on sundry unsettled accounts.....	7,332 33
Probable cost of unfinished work, consisting of covering and painting bridges, depots, division houses, extension of turnouts, etc.....	10,000 00

Total cost of 68 miles of road, including \$105,000 paid for duty on iron.....	\$819,984 23
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The plan of superstructure adopted for the extension, is described in my annual report of May, 1844. From our experience thus far, we are satisfied that it is better adapted to southern railroads, that have a considerable transportation, than any other. The iron rail is of the Ω form, weighing 40 lbs. per yard, laid on a continuous bearing of pine timber.

We have also expended during the year, in the purchase of locomotives, etc., and the construction of new cars, necessary for the increased length of the road, the following amounts:

For new locomotives, tenders, etc.....	\$24,366 63
40 new close freight cars.....	\$22,000
10 stock cars.....	4,750
2 large 8-wheel and 1 4-wheel passenger cars.....	5,080
1 long baggage and postoffice car.....	1,100

Less value of five cars to replace two close and three open cars, worn out, and charged to expense account.....	2,450
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	30,480 00
	\$54,846 63

To complete the outfit deemed necessary for the increased business expected next year, we have made arrangements for building

36 close freight cars, which will cost...	\$21,000 00
17 open " " " " " "	9,000 00
2 passenger and 1 baggage car.....	4,000 00

Total.....	\$34,000 00
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These added to our present stock, will make our complement—150 close freight and stock cars, 70 open cars, 10 passenger and 4 baggage cars.

Our motive power now consists of 6 second class freight engines with single drivers, 5 freight engines with six wheels all-connected, and 4 passenger engines. Three additional locomotives will also be required, one of which has already been ordered.

The warehouse at Augusta has been extended 127 feet, and is now 288½ feet by 40. The offices have been removed from the main building and placed upon its side, giving additional room for storage, which is now deemed sufficient for the wants of the company for many years. A new brick iron foundry, 40 by 80 feet, has also been erected, and material alterations and additions made to the shops. The erection of a larger engine house, and more comfortable quarters for our negroes, will constitute all the buildings that will be needed at Augusta. These together with the removal of the car factory to the back part of the lot, will cost about eight thousand dollars.

From the annexed statement, (which includes the receipts for freight on the W. and A. railroad,) it will be seen, that notwithstanding a short crop of cotton in the region tributary to our road, the operations of the year present results by no means discouraging.

BUSINESS.

Passengers up.....	\$47,129 12
" down.....	44,330 03
Extra trips, extra baggage, etc.....	1,312 78
Negroes in lots.....	870 50
Freight up.....	114,938 09
" down.....	75,302 13
" between way stations.....	4,858 34
United States mails.....	37,671 67
Rents.....	417 65

Amount.....	\$326,831 51
Deduct amount paid to Western and Atlantic railroad for freight due to that road from the commencement of its operations, to 1st April, 1846.....	11,489 92

Leaving the business of the Geo. R. R. R.....	\$315,341 59
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EXPENSES.

Conducting transportation.....	\$31,353 53
Motive power.....	36,406 46
Maintenance of way.....	53,592 56
Maintenance of cars.....	14,851 19

Leaving net profits.....	\$179,137 85
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The customary statements exhibiting the receipts and expenses, in much detail, will be found among the accompanying papers.

The business of the road exceeds that of last year, \$43,592 07, of which \$16,079 27 was received from passengers, \$21,385 60 from freights, and \$6,129 20 from mails, etc.

The whole number of bales of cotton carried over the road during the year, was 56,821, showing a decrease compared with the previous year of 21,127 bales. The down freight has fallen off, however, but \$14,819 56, owing to the transportation of other products than cotton, to a greater extent than usual.

The increased receipts of the road, notwithstanding the reduced rate of our charges, and the deficiency in the crop, exhibit results that must be gratifying to every stockholder, particularly to the advocates of its extension beyond Madison, by which alone its prosperity has been preserved.

With an average crop of cotton, our business would have reached \$350,000—the amount calculated as the probable receipts from the first year's business, after the completion of the whole road—although the most important part of the work was not brought into use until the close of the first six months of the year.

The average number of passengers, carried both ways during the year, per day, was nearly 66; of these, there was an average of 5 per day each way, entered through from Charleston to Montgomery.

The completion of the Western and Atlantic railroad to Oothcaloga, has virtually extended our road 80 miles beyond Atlanta, making the whole length of road from Augusta, 251 miles, (upon which the maximum gradient does not exceed 37 feet per mile,) which is nearly double the length of continuous line in use previous to September last. Under an agreement with the state of Georgia, our freight cars run through without transshipment. This arrangement enables us to carry freight at reduced rates, materially increases the usefulness of the road, and extends the circle of its influence.

At Oothcaloga we fairly enter the grain growing region, and our freight lists—which have heretofore been filled almost entirely with an enumeration of cotton bales—now exhibit the same variety of the products of the soil and mines, usually noticed in the statements of northern works penetrating agricultural and mineral districts. The amount of this description of freight is yet small, but with the extension of the road to the Tennessee river, it will become equal to, if not greater than is now transported upon any railroad connecting the Atlantic and western states.

The easy access to the seaboard from Augusta, either at Charleston or Savannah, must, if seasonable efforts are made on the part of her citizens, make her the great depot of these products, and consequently the point for exchanging them for merchandize for the consumption of the interior. The whole freight on agricultural products, from Chattanooga to Savannah, and to Charleston—if the South Carolina company should reduce its charges—will not exceed a half cent per pound; a rate, which must divert from the Mississippi the transportation of a vast region of country now tributary to New Orleans. It has been our practice heretofore to place the rates of freight on these articles comparatively low, deeming it true policy to encourage this transportation, even at cost charges, relying on receiving a return freight, from the proceeds of their sale, which would afford remunerating rates. I am fully satisfied that this policy should be continued.

The expenses of working the road, include the transportation of about 3,000 tons of iron and other materials for the extension, an average

distance of 150 miles, at an actual cost of about \$5,000. If we deduct this sum from the expense account, (\$136,203 74,) there will remain \$131,203 74 as due to the regular business of the road, which is equal to 41½ per cent. of the receipts.

The expenses per mile, run by the trains, for the past three years, are as follows:

	1844.	1845.	1846.
Conducting transportation.....	17½ cts.	16½ cts.	13-9 cts.
Motive power.....	16½ "	14½ "	16-1 "
Maintenance of cars.....	6½ "	8½ "	6-6 "
Maintenance of way.....	25 "	23 "	23-7 "
Totals.....	66 cts.	62½ cts.	60-3 cts.

The number of passengers transported over the road during the year, is equal to 2,183,645 carried one mile, at a cost to the company of 2½ cents each.

The whole tonnage of the road, exclusive of materials for repairs, and including iron and lumber for the extension, is equal to 3,440,000 tons carried one mile, costing an average of 2 cents per ton per mile. The regular business of the road for the year, including the transportation of the Western and Atlantic railroad iron, is equal to 2,990,000 tons; which, if no charge is made for the transportation of materials for the extension and repairs, will give the cost per ton per mile, 2½ cents, or a little over one mill per 100 lbs. per mile.

The average cost of maintenance of way per mile of road, is \$274 80, which includes re-laying four miles of the Tilghman track, and provisions furnished negroes laying iron on the extension. The cost next year will be somewhat increased, from the necessity of keeping the road in more perfect adjustment, in consequence of the greater speed of the trains; it will not, however, reach \$300 per mile.

This department has been placed under the immediate direction of James H. Grant, as resident engineer, who was engaged for several years upon the construction of the road. His long experience, professional skill and great integrity of character, render him eminently qualified for the post he fills; and I feel entire confidence, that this branch of the service may be safely entrusted to his charge.

The transportation department has, under all the circumstances, been conducted by Mr. Arms in a manner very satisfactorily. With the exception of an interval of a few weeks, when the sudden increase in the length and business of the road, rendered it necessary to adopt a new system of running the freight trains, and add to the force several untried men, the trips have been performed with more than their usual regularity. The average speed of the passenger trains, was increased four miles per hour, which, for a time, caused some irregularity in their trips, and has rendered it necessary to incur heavier outlays on the repairs of the road.

The lower 75 miles of our road, it will be recollected, is laid with a plate rail $\frac{3}{4}$ by 2½ inches. Although this has been in constant use for nearly nine years, the iron does not seem to be greatly worn. A few bars have been broken at the spike holes, and others

have failed from originally imperfect welding. Probably half a mile of new rails would replace all the defective bars. But as we shall require fully a mile of iron to increase the length of our turnouts, I would recommend the purchase of a small quantity of Ω rail, and the removal of an equal quantity of plate rail—including the defective bars—to the turnouts.

The increase of our business, and the demand of the public for high speed, for which the plate rail is not well adapted, will, I am convinced, at no remote period, render it necessary to relay this part of the road with a heavier rail throughout. This might be done as far as the material would reach, by the erection of furnaces and a rolling mill, with which to convert the present iron into a heavier rail; but I apprehend that it will be found more economical to sell the present bar and purchase the article desired.

In closing this report—the last annual communication that I shall probably make to the company—I cannot refrain from expressing my sincere acknowledgements to the board and stockholders, for the uniform confidence that they have manifested, throughout our connection, in my professional plans, and the management of the various interests of the company committed to the discretion of this department.

The enterprize that we have been for many years so ardently engaged upon, has been brought into successful operation; and it gives me pleasure to add, that those shareholders who have patiently continued with us to the final consummation of the object for which we have struggled, against adverse circumstances, have not only the gratification of having been instrumental in scattering incalculable benefits through a vast region of country, but they have made an investment in a property which yields a fair return for their capital ventured in its construction.

All of which is respectfully submitted by your obedient servant,

J. EDGAR THOMSON,
Chief Engineer and General Agent.

Miscellaneous Items.

Safety of Railroad Travelling.—It is an impression, says the Boston Traveller, somewhat prevalent in the community, that travelling by railroad is attended with more danger than any other mode of conveyance. We are fully convinced that this impression is erroneous, and that in reality "car riding" is attended with less danger than other modes. In proof of this let us look at facts. We are informed that since the opening of the Eastern railroad about 4,000,000 of passengers have passed over the road, and that of the entire number not a single passenger has lost life or limb! Now in what other way could these 4,000,000 have travelled so safely or so comfortably? Let us suppose them placed in stage coaches, and allowing 10 for each coach, they would require 400,000 coaches and 1,600,000 horses. If these coaches should be extended in a line, each occupying two rods, they would form a continuous line 2500 miles long, and if they should move constantly at the rate of 8 miles per hour, it would

require about 312 hours, or 13 days for them to pass any particular place.

Or, we will place them in steamboats, and if we put 200 in each boat, we shall need 20,000 boats, and these, allowing 40 for every mile, would form a continuous line 500 miles in length! Or, if we arrange them in a square, allowing 40 in width and 40 in length to every mile, we shall have more than 12 miles square, or about 150 square miles of steamboats. What a fleet this would make!

We think a glance at these facts and suppositions will convince any one that the modern mode of rail riding is the safest mode of riding, and certainly it is the most comfortable, rapid and cheap mode. It is true that the road on which our calculations are based has been managed with great care and skill, but we do not doubt that all other roads will give results sufficiently favorable to confirm our position.

Essex Railroad.—Considerable progress has been made in grading the past week, notwithstanding the great heat of the weather.—The bridging across Fry's mill pond is nearly completed, and almost the whole line will be graded from North river to Grove street by the middle of next week. The laborers have been at work more than 20 days. The ease and facility as well as cheapness of constructing a road over this route exhibits in bold relief the grand error of the early managers of the Eastern railroad in determining on their location for the route to Boston.—*Danvers Cour.*

The Madison and Indianapolis railroad was not so much injured by the flood as the western papers represented. A letter from the president of the company says, that the damage will be repaired in a week, at an expense of about \$1,200. Some years hence, the culvert must be permanently repaired at a cost of about \$5,000. The injury to the road does not interfere with its constant use. *N. Y. Com. Adv.*

Reduction of Tolls.—The rates of tolls on merchandise and furniture shipped on the Wabash and Erie canal in Indiana, have been reduced to 20 mills per 1,000 pounds for each mile not exceeding 100 miles, and 15 mills per 1,000 pounds for each mile in addition to 100.—*Pathfinder.*

Boston and Montreal Road.—The Concord Courier remarks that the opinion is now given in confidence by the friends of this road, that its affairs have been placed on such a footing that the construction of the road between this place and Meredith Bridge will be entered upon immediately, and that the road will be completed to that point with all due despatch. Operations have already been commenced on the bridge, over which the road crosses the Merrimac in this town.

Ice Business.—Accounts from Boston state that the sales of ice in that city have increased one-third over those of any previous year. The business there is carried on with great system and economy, and the ice sold at low rates. Hence its use is rapidly increasing amongst all classes, who discover new wants

for it every year. It is now a large article of shipment to all parts of the world. In London it has a preference over all others.

Walpole Railroad.—The Dedham, Mass., Democrat says "we understand that the prospect is very encouraging in relation to the road to Walpole. A large proportion of the stock is taken up, and we learn that the owners of the land through which it is to pass, have manifested the utmost liberality in relation to it, as regards damages, etc. A call for a meeting of the company is advertized to be held at Sumner's hotel in South Dedham, on Friday the 2d of October next."

Rome and Memphis Railroad.—On Thursday last, says the Rome Journal of the 16th inst., the adjourned meeting of the stockholders of the Rome and Memphis railroad, assembled at the court house in that place, for further preliminary arrangements in relation to the construction of the road. On that day the entire capital stock of \$150,000 was subscribed, and the sum of \$15,000 (\$5 on each share,) paid in. The stockholders proceeded to the organization of the company, by the election of directors.

The following gentlemen were chosen directors: John P. King, Dan'l Tyler, Alfred Shorter, Wm. R. Smith, J. W. M. Berrien, Dan'l R. Mitchell, John E. Park.

Subsequently the directors assembled for the purpose of electing their officers, when the following gentlemen were chosen: Wm. R. Smith, *president*, John E. Park, *secretary and treasurer*.

The road will extend from Kingston, descending the Etowah river, to the junction of that stream with the Oostenaule, the distance being, from the survey already made, about 17½ miles. It is estimated that the actual cost of the work fully equipped, cannot exceed half of the capital stock subscribed.

Quick Work!—The Baltimore Sun says: "A communication was made from Buffalo to Baltimore last week, and an answer was received at the telegraph office in the former city in about two hours! It will be borne in mind that the wires are not as yet connected between New York and Jersey city, and that the communication and answer had both to be re-written at Jersey city and Philadelphia. Thus this great work is progressing, and will soon gird the Union.

Ocean Steam Navigation.—We learn from the New York Express that the "Ocean Steam Co.," which has the patronage of the United States government to the amount of \$400,000 per annum, are getting on rapidly with the first steamship of their line. She is to be completed and commence running on the 1st of March next. The second steamship will be put under contract some time next month.

We learn from the Boston Times that the Vermont and Massachusetts railroad is being forwarded with much spirit, and the prospects are very promising.

The first section to Gardner is expected to be opened by the first of March next; and to Athol by the first of July. For four or five

months past, the prospects of the road have very much improved, and there is no reason why it will not be carried forward to completion—in fact, from Fitchburg to Miller's river, it is already not only under contract, but a portion of the way is ready for the rails.

The Baltimore Sun gives an account of a hand printing press, lately invented in London, which with ordinary power, viz: one man at the rounce, will work off four times as fast as any other press, the steam press or power excepted, has yet been able to work. A strong hand can work from 1200 to 1500 impressions an hour. The size of the press is about that of the common double pull press.

The directors of the Cape Cod branch railroad at their meeting on the 8th inst., chose a committee to engage an engineer, and have the road located immediately.

New Route between Boston and New York.—The Boston Times says that a large and heavy steamer of 1450 tons burthen, and 315 feet long, is in the course of completion at New York, which is intended as the pioneer of a new line about to be established to run from that city to Fall River, and from thence to this city by railroad. She is building under the direction of Capt. Joseph Comstock, and will cost, when completed, \$160,000. Another of the same size will be shortly contracted for.

In Less than No Time!—The Rochester Advertiser of the 18th inst. says, yesterday at a quarter before three, we received word from Boston, via New York, that there was no steamer in sight at three o'clock.

We learn with pleasure, from the Baltimore Sun that the Hon. Louis McLane resumed, on the 14th, his station as president of the Baltimore and Ohio railroad company.

Willmer and Smith's Times says that "the British iron trade has sensibly improved in consequence of the passage of the new American tariff; a fact that will be gratifying to the American iron trade, as it must tend greatly to relieve any excess of apprehension that may have been thoughtlessly and foolishly engendered."

Buffalo Telegraph.

The Buffalo Commercial remarks in reference to telegraph lately finished from New York to that city, that "the connection of New York city to Buffalo, by telegraph, which, when first talked of, was received with a smile of incredulity, is complete, and communications between the two terminating points are now interchanged with ease and regularity. By an arrangement entered into early last month, the papers in Albany, Troy, Utica, Syracuse, Auburn, Rochester and Buffalo, will be furnished with reports twice a day from New York—one in the afternoon, at half past 2 o'clock New York time, embracing the markets, and a brief summary of news; the other in the evening, beginning at 8 o'clock."

Something Novel.

A late European journal says that the "travellers on the Dutch railroads, being much annoyed by the dust during the hot weather, an expedient has been devised for the purpose of preventing annoyance by attaching a car pierced with holes, behind the tender. The car is filled with ice, which, being melted during the journey, effectually lays the dust!"

This may do, but we should hardly think it practicable. The demand for ice would be great, at all events! Passengers who go over the Long Island road, would be very glad to realize the benefits of this experiment, however—if there be any!

Correspondents will oblige us by sending in their communications by Tuesday morning at latest.

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AMERICAN RAILROAD JOURNAL.

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Cars.—Minor Comforts and Conveniences.

As in human life small matters make up, according to which side the balance falls, either happiness or unhappiness—so the mere comfort or discomfort of large numbers may be produced at will by the variation of a few trifling particulars, which may happen to concern them. And when such numbers are thus exposed either to pleasure or pain, under circumstances having a tendency to make all men peculiarly sympathetic, to unite individual grumblers in general indignations—we cannot wonder at the vast mischief produced by neglected trifles.

In this view we think that in accordance with the plan we have marked out, the minor comforts and conveniences of railroad cars are well worth attention.

We have already spoken of the tendency to expend money upon the ornament rather than the comfort of cars as well as of vehicles of all sorts. Some of the finest specimens of car building which we have seen are not open to this objection—and the hope that much good having been done may tend to more, leads us to enumerate several points of convenience not uncommon in some of the best cars, but not all united in any one which we have seen.

The Material for the Cushions, Backs, etc., of the Seats.—This should be strong, not easily discolored, not apt to retain the cinders, and therefore not apt to give them or their dust to the clothes. No substance answers these purposes so well, is so cheap in the end, and so tasteful in its appearance, as the uncolored hair seating, now in use on many roads. Its use favors cleanliness in the cars, for a single wipe with a cloth removes all dirt, and it is the least apt to soil the clothes—in fact there is but one objection to it, viz: that from its slight adhesiveness, where the seat is not broad enough, a passenger reclining too carelessly, may, by a sudden jerk, be thrown upon the floor, or stop before he gets there at the risk of cutting in two his spine. All this may be remedied by the use of foot boards—one of the happiest introductions into some of our modern cars. By means of these the seat is better retained in a variety of positions, than could be done without them, on the slippery hair covering—passengers are less apt to put their feet upon the seats when they can stow them more comfortably elsewhere—the comfort derived from the varied posture which they admit—are all strong arguments in favor of one of the least costly and most useful conveniences of the car.

Windows.—to combine all the desirable points—should be so placed as not to injure the strength of the car, should furnish light and air at and above

the heads of persons seated; should open and close with the greatest ease, and yet be free from all shake or rattle. Contrivances for these purposes are very numerous, and yet few answer. A spring operating on the sash seems the best means of preventing the unpleasant noise, but the means of opening and shutting the windows are generally such that one-third of those in a car are useless.

Some means should also be supplied for excluding the sun light and admitting the air at the same time, if necessary. Few of those usually adopted are without fault. Contrivances, perhaps of wire gauze screens, may possibly be made which will supersede all others.

State Rooms, as they are now styled, are admirable contrivances, well suited for families with young children, parties of two or more desiring privacy, or for invalids. Several cars in each train should have them, and as they are not constantly occupied by the same persons, many are thus accommodated.

There is another apartment which we need not name, but its uses are so necessary that no car should be without one. The absence of one with an unobtrusive entrance in cars which make a long trip, is nothing but downright cruelty.

Last of all, the fastenings to the doors should be strong, firm and free from useless friction, so as to be easily opened and closed, and all broken or injured fastenings should never remain over one day in use.

We may remark that one of the most comfortable cars we ever entered, was one of the first built by our friend Imlay, for the Philadelphia and Wilmington railroad, some eight or nine years ago; yet in point of durability of structure, ease of motion, and elegance of finish, we can refer with confidence to those made by Davenport & Bridges, of Cambridgeport, Mass.—and Eaton & Gilbert, of Troy, New York.

Railroad Connection between North and South Carolina.

To the Editor of the American Railroad Journal:

In a recent number of your valuable paper, I observe an article headed "Southern Railroad," in which you notice favorably a recommendation for capitalists to invest in a contemplated connection between the northern and southern roads, by way of Raleigh and Fayetteville, N. C., and Camden, S. C.—setting forth that a road can be constructed from Raleigh to Camden for \$1,000,000! The road from Gaston to Raleigh, 80 miles, cost \$1,600,000; by what process, then, can it be expected to construct a continuation of that same road from Raleigh to Camden, about 180 miles, over a similar country, for \$1,000,000! There must be some mistake in the estimate, calculated to mislead the public. My object, however, is not to throw obstacles in the way of a successful prosecution of that scheme, but to call attention to another, it may be a rival, scheme, having the same object in view, i. e., a connection between the northern and southern roads. The scheme I have reference to is the contemplated road from Wilmington, N. C., to Camden, or some other point of connection, with the southern roads. The distance is about 140 miles, over a comparatively level country; of the cost of which I will not hazard a conjecture, as there is a corps of competent engineers now engaged in making a survey of that route, who will be prepared to furnish an actual report of the cost of a road some time in October or November next.

A TRAVELLER.

We give place to the remarks of "A Traveller,"—whom we know to be a gentleman of intelligence and standing in the "Old North State"—with plea-

sure, as we shall the report of the engineer, when we receive a copy.

Our object in publishing the proceedings of public meetings, or communications from individuals, in relation to contemplated railroads, and rival routes, is to endeavor to throw light upon the subject—to draw attention to it, and, if possible, to promote the construction of such works as are required to complete the connection of, and to properly carry out the railroad system. We have no private interest to serve, nor griefs to assuage. The best route if possible—but a railroad at all events over some route between the roads of North and South Carolina, should be constructed at the earliest possible period. Wilmington and Charleston have a deep interest in the construction of the lower route; and it behooves them to move early in the matter, or the upper route will be likely to get the start of them. Of the relative merits of the two routes we cannot—for the want of accurate information—speak; but as to the great importance of a railroad to connect the roads of the north with those of the south, we are sure that we are not mistaken in saying that it is one of the most important links yet wanting in the great Atlantic chain.

Low Fares upon Railroads, And the Camden and Amboy Railroad.

In a previous number we gave some extracts from the "address" of this company, to the people of New Jersey, which exhibited the manner in which this combination originated, what privileges the company enjoyed from their charter, what was the prospect ahead for them, and how they had managed from the commencement of their operations. We concluded our remarks by saying that the managers had adopted a price which has proved a burthensome and exorbitant tax upon through passengers, and we promised to show what our reasons were, why this company could, and ought to reduce the fare from the present high rate, (four dollars,) to and from Philadelphia and New York.

In the first place then, we say that the construction of the road from Jersey city to Bristol, has not cost the proprietors more than other roads upon our eastern borders, nor as much per mile as some other routes which we can refer to.

The distance from New York to Philadelphia is set down at about 90 miles, and the fare at \$4 brings it near four and a half cents per mile, for carriage, in first class cars. At the present high rates of conveyance, as compared with last year, on the Boston routes via Long Island railroad, Stonington, or Norwich routes, a distance of 232 miles, the rate is but one and seven-tenths cents per mile. Upon the Baltimore and Philadelphia routes—distance 93 miles by railroad, the fare—generally declared exorbitant also—is but \$3, or three and two-tenths cents per mile. From Boston to Portland, (Me.,) a distance of 109 miles, the price of fare is \$3 in first class cars—or an average of two and seven-tenths cents per mile. From Boston to Fitchburg, 50 miles, the fare is \$1 25, or two and a half cents per mile. The fare upon the Boston and Concord route, is \$1 75, distance 75 miles, or two and three-tenths cents per mile. The route from Boston to Plymouth is 37 miles, fare \$1, or two and seven-tenths cents per mile. From Albany to Boston 200 miles, the fare is \$5, or two and a half cents per mile. From Albany to Buffalo, distance 326 miles, the fare is \$12, or a fraction over three and six-tenths cents per mile, which is altogether too high. We are under the impression that a through ticket, at ten dollars, has been adopted on this line, but are not quite sure—therefore we give it as above. From Boston to Lowell, 26 miles, the fare is but 65 cents, or two and a half cents per mile—and this last road is

known to be one of the most costly, and yet it is paying as well as any in the country.

We might quote numerous other routes, but the above are the principal ones north of Baltimore, and will serve to show fairly the comparison we desire to make. Upon the routes we have enumerated, (nine in number,) and embracing all the principal connecting links between Portland, Boston, New York, Albany, Buffalo, Philadelphia and Baltimore, the average fare is but a trifle over *two and six-tenths cents per mile*. These roads are generally in good condition, the cars and appointments are, to say the least, equal to those on the roads now under consideration, and there is no falling off, apparent in their prospective prosperity.

Upon some of these roads [and we now refer more particularly to the "Boston and Lowell" road, as well as certain portions of the Eastern and Norwich and Worcester roads,] the price of fare has been considerably reduced from the original rates, within the last year or two. The experiment has proven to work admirably—more passengers are carried over the routes, commutation tickets are eagerly sought for, by the business men who desire a country residence, ten or twenty or fifty miles from the city; towns and villages will spring up along the line, the quantities of merchandize and freight passing to and from all points is greatly increased, and the companies who have adopted the principle of low fares, are succeeding beyond their most sanguine expectations. This has been established by actual trial, and therefore it is *known* to be practicable.

If then, the experiment adopted by a road as extensively constructed as most of the roads in New England must necessarily be, has worked so well, we can see no sort of reason save *that of individual or private interest*, or a determination to wield, with *relentless hand*, the power possessed, which can be urged against our proposition. We cannot however for a moment entertain such an idea of those who manage this company, and will therefore, for the present pass over this point.

The establishment of all great internal improvements are, or most assuredly *should be*, for the *public good*. The public is looked to, and appealed to, for support, and the result has proved that when these improvements have been properly conducted, with a view to the convenience and general accommodation of the wants and wishes of the public, the stockholders have invariably been the gainers. It is *not*, and *never* was intended that legislation should give to the *few stockholders* in any chartered company, rights or privileges which interfere with the comfort, desires, or interests of the people, who through their representatives, confer the privileges, secured by their charters. Nevertheless, in the instance before us, we have an exemplification of the results of the "*wise policy*," so strongly commended by the "address of the Camden and Amboy railroad company," and which secured to that company for *fifty years*, legally, such monopolizing privileges as no company before it ever yet enjoyed in this country—such "*privileges*" as no corporation should ever have been suffered to enjoy! Upon this point, however, we shall be more explicit hereafter.

We now come to the matter directly at issue in the premises, and shall close our present article with a few remarks and suggestions for the especial consideration of the "*powers that be*" connected with the railroads between this city and Philadelphia.

We contend then, that whatever of legalized power may be contained in the charter of this company, or whatever *peculiar "rights"* may have been delegated to this corporation, through the influences of le-

gislative "*log rolling*,"—for the pamphlet before us declares, in substance, that by the most determined and extraordinary efforts, only, was this charter and its extension obtained—those rights and privileges were given by the people of New Jersey to *use* and *not to abuse*. That there exists a vast deal of mismanagement, and that an overbearing and offensive disposition is constantly being evinced upon this road, towards passengers, by those whose duty it is to make the route a pleasant one, few will dispute! Of this, however, we have nothing more to say, at present. Our object is to show, if possible, that *the fare ought to be reduced*, and to convince the parties interested, that *it can be done* with increased profit to the stockholders, and very greatly, increased benefit and convenience to its supporters, *the public*.

Upon this subject, the St. Louis New Era remarks very truly, that "in Massachusetts, the average price of passage on the railroad cars is two and a quarter cents per mile in the first class of cars, and one and a quarter cents per mile in the second class. The companies have prospered most and secured the largest dividends when the price of passage and freight was kept very low. This has also been found to be the case in Europe. It is also the case with ships and steamboats."

We have shown, in the early part of this article, that the fares, established on *every other road*, north of Baltimore, is very considerably less than upon this, and in most of the instances quoted the price is but about, or a little more than *one-half* that charged upon the route to Philadelphia. Now none will say this road is not *generously* patronized, nor will it be contended, that the accommodations are anything *more* than they *should be*! The expense attendant upon conducting this route, and running the trains, is no greater than proportionate on other *well* managed roads, and we assume that *other* roads yield a handsome profit, *other* roads are well managed, and *other* roads are in every way successful, *with rates of fare 50 per cent. lower than this*. We are not at this moment, prepared to say how much *below* two cents per mile, the carriage for passengers upon these railroads can be made profitable; but we do say—and the statistics will support us in the assertion—that *TWO DOLLARS AND FIFTY CENTS* for an hundred miles upon *any* of our principal eastern routes, is ample fare; and we sincerely believe if the price were at once put down to *two dollars*, from Philadelphia to New York, the stockholders would reap a greater per centage than they *now* realize at four dollars.

All experience bears us out in this position—where the line of road passes through a thickly populated country, and especially with a large city at each terminus—and we point the reader to the roads in New England, especially, for proof of our statement—not one of them but pays a handsome dividend, upon a fare of two and a half cents per mile, and many at a less rate even; and not one of them but is permanently profitable, with a rapidly increasing business. We appeal, therefore, to the better judgment of those directly interested in this matter, and ask their candid and careful attention to the *facts* we have now presented. The country along the entire route from New York to Philadelphia, and particularly for some miles from each terminus, is capable of vast improvement.

Were the price of fare to be placed within the reach of men of moderate means, the amount of travel would be immediately increased; new towns and villages would dot the line of this road, as is the case throughout New England, and the miles of "*desert lands*" which now skirt some portions of

this route on either side, would, in a short period be made to "*blossom like the rose*." In the meantime the business of the route would be enhanced in every way, the travel would increase, and we feel certain in the prediction, that within two years, a much greater per centage upon the stock would be realized by the company. Travellers who now visit either city, but once a year, at \$4, would thus be induced to go twice or thrice, in a twelve-month; strangers would embrace the opportunity, while visiting one city, to enjoy a trip to the other, a luxury which cannot be afforded by every one, at the present rates: the business man would have his "*country house*," and the gentleman of leisure his summer mansion, in the vicinity of the cities. The conveyance of merchandize for the accommodation, convenience, and wants of a new and growing population along the route, would increase the carrying trade, and while the stockholders were reaping a growing advantage, the people who gave them their chartered privileges, and others from other states, would participate in the benefits accruing from, and intended by that gift. We again call the attention of this company to these facts, and trust that they will be received in the same spirit with which these hints are thrown out; believing as we do, that by proper management, and by evincing a disposition to *promote the public accommodation*, and the general good, that the company will secure the good will of the travelling community, and the people at large; and that not only in the end, but immediately they will reap a far richer pecuniary harvest, by the change we propose, than by persisting to maintain their present unreasonable and exorbitant rates.

We shall again and often refer to this subject, until the reasonable demands of the travelling community are attended to.

Atmospheric Railway System in England.

The article which follows, is extracted from the "London Mining Journal," of August 8th. It contains information interesting, at least to those in this country, who have watched the progress of the system, which has been as yet but indifferently understood, or appreciated. The writer remarks very aptly, that "Fulton was the object of railery, even at the moment his steamboat was in motion"—and the principle of the atmospheric railway system, now but partially developed, will, in our opinion, at a future day, be the source of a higher and greater interest, than can now be conceived. We shall endeavor to keep our readers familiar with the progress of the system—or of its failure, if it *should fail*—of which we have little apprehension.

Progress of the Atmospheric Railway System.—(From the Reporter of the London Morning Herald.)

A few days since, I had an opportunity of testing the speed on the Croydon atmospheric, with light passenger trains, with the velocity reached on the Eastern Counties line with the special train to Yarmouth, the working of which I gave about a fortnight ago.—Until within the last three weeks the Croydon atmospheric has ceased running for some time, in consequence of the melting, during the recent extreme high temperature of the weather, of the composition used to prevent leakage in the longitudinal valve, and in consequence also of some slight imperfection in the longitudinal valve itself. During the cessation of its working, the defect in the valve has been remedied, and a new composition applied. This composition, it is said, will

work at a temperature of upwards of 140° , while the highest temperature of the tube during the late very hot weather was about 132° . It is also stated, that the composition will work perfectly well at 20° below freezing point.

The history of the progress of the atmospheric system, up to the present power of working is extremely interesting. It teaches us, likewise, the wisdom of receiving with much caution the theories of the most scientific men on practical subjects. Fulton was an object of mockery, even at the very moment his steamboat moved. It was not till it had breasted the waters for some distance, that the multitude who had assembled to witness its failure were sensible of their own presumption; and just in the same way that the predicted tractive power of the locomotive was ridiculed, was the asserted capability of traction by the exhaustion of a 15 in. tube emphatically disputed, and treated with contempt by the great promoters of the locomotive system—the very men who had themselves realized to the public rates of speed, which they had been told the locomotive could not possibly be made to attain.

The atmospheric system, undoubtedly, has its advantages; its opponents assert, that it has many disadvantages. I shall not attempt to decide between the contending parties.—My present object is to point out very briefly what it is now doing, and contrast its power with what it was said to be capable of performing.

That it has power, the actual working at I am about to give will prove; and that it insures steadier, more luxurious, and safer travelling than the locomotive, all will readily admit. The questions to be decided before it can be declared commercially useful for long lines, are—Can regularity of departure and arrival be secured, and is the system sufficiently economical to warrant the construction of lines on the principle? These are questions into which I shall not here attempt to enter. To deal with the one, requires much more information than I am at present in possession of; and in the other is involved the propriety, as well as the power of maintaining a totally different system of passenger trains, and mode of accommodating the public. This is also too important a matter to be touched upon in a notice, the object of which is merely to elucidate two or three interesting facts connected with the progress of the system. In May, 1845, one of the most eminent railway engineers of the day, and himself, perhaps, the first locomotive manufacturer in the world, stated before a parliamentary committee, that a three mile section of a 15 in. atmospheric tube would not, with a vacuum of 20 in., be equal to more than 17 miles per hour on a level with a 40 tons train. How encouraging to struggling genius that these mistakes of great men, when dealing with its inventions and discoveries, should be made public! On the 16th of May, 1845, Mr. Robert Stephenson, in his evidence before the Northumberland committee, stated that the above was the limit of the tractive capacity of a three mile section of a 15 in. tube, with such a vacuum and such a load.

I give the following extract from a transcript of the short hand writer's notes of Mr. Stephenson's evidence, in proof of what I have stated.

'Cross-examined by Mr. Serjeant Wrangham.

'In point of fact you think the average rate of travelling would be 17 miles an hour?—I do not think with a three mile pipe it would exceed that. I do not indeed.

'Committee.—Referring always to trains of 40 tons weight? Yes.

'Mr. Serjeant Wrangham.—This is taking the case of a train starting after having stopped—starting from a state of rest? No! I am supposing a train put into a tube at the end and in motion; even then, it would not maintain an average velocity over three miles of more than I have stated.

'Do you mean that if a train runs in, at say 17, that it will not do more than maintain the same velocity? No, I do not think it will.

'I understand you, that taking a through train which never stops at all, it would travel at the rate of 17 miles an hour from Berwick to Newcastle? It might possibly exceed that when it came near the engine; but I do not believe the average in the three mile sections would exceed that. All my experiments here lead me to that conclusion.'

Such was the emphatic opinion, I say, of one of the first railway engineers of the day. But what is the actual working of a three mile section of 15 in. tube, with 35 tons equal to, with a vacuum not of 20 in., but considerably less! I will take the usual 9h. 50m. morning train from Croydon, and show what it is equal to. The train consisted of—

Three first class carriages—4 tons 2 cwt., each tons. 12 6
One third class 3 15
A third class piston and heater carriage 12 0—23 1
Passengers, 97 7 0

Total tons. 35 1

The train left the Croydon platform at 9h. 54m. 40s.

Mile posts.	Time per quarter. Vacuum.		
	h. m. s.	Miles in seconds.	Inches.
Started	9 54 40		
Entered tube	9 55 52	19½	
1	56 23	19½	
1½	57 2	40	
2	57 32	30	71½
2½	58 20	24	
3	58 20	24	
3½	59 3	20	
4	59 3	20	
4½	59 3	20	
5	59 3	20	
5½	59 3	20	
6	59 3	20	
6½	59 3	20	
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97½	59 3	20	
98	59 3	20	
98½	59 3	20	
99	59 3	20	
99½	59 3	20	
100	59 3	20	

It is here seen, that from platform to platform, a distance of nearly five miles, including getting up and reducing speed when departing from Croydon and arriving at the Forest Hill station, the time occupied was

8m. 44s., which is something like 34½ miles per hour, and that the maximum speed was 56·25 miles per hour.

The next through train, the speed of which I noted, was the 10·50 morning express train, also from Croydon. This train consisted of the same number of carriages, and of about the same weight, that were taken down to Yarmouth by the special train.

Mile posts.	Time per quarter. Vacuum.		
	h. m. s.	Miles in seconds.	Inches.
Started	10 53 30		
Entered tube	10 54 30	19	
1	56	18½	
1½	56 28	32	17½
2	57	23	
2½	57 11	20	17
3	57 29	18	
3½	57 46	17	16
4	57 57	16	15
4½	58 18	16	14½
5	58 33	15	14
5½	58 48	15	12½
6	58 58	15	
6½	59 17	14	10
7	59 32	15	
7½	59 47	15	
8	59 59	14	9
8½	60 15	14	
9	60 32	17	8½
9½	60 49	17	
10	61 11	15	26

The five miles were, in this journey, gone over in 6m. 45s.—that is, from platform to platform—or at the rate of 43 miles per hour; the maximum speed being 64·28 miles per hour, and the average speed for two miles out of the five about 62 miles per hour.

I will now compare the working of the atmospheric 15 in. tube with that of the 6 ft. driving wheel engines used on the trip to Yarmouth with the 30 tons; and, in doing this, I shall adopt a mode by which the advantage is sure to be something on the side of the locomotive. In the trip to Yarmouth, the shortest distance run without stopping was from Norwich to that place, but as I could not make out the mile posts for the first seven miles after leaving the Shoreditch station. I am compelled to reckon from the mile posts beyond the stations. Of course it will frequently happen that the mile post is but a few yards, or nearly a mile from the station, I have therefore, reckoned from the second mile post past the stations on the locomotive line, while I have reckoned from the first only past the atmospheric station. The speeds will then stand thus:

Miles.	Bishop.		Atmospheric.	
	Stortford.	Cambridge.	Brandon.	1st trip.
1	98	81	81	87
2	100	78	83	73
3	102	77	82	68
3)300	3)236	3)246	3)227	3)184
100	79	82	76	61

36 miles per hr. 45·56 do. 43·9 do. 47·36 do. 61 do.

Atmospheric train 61
Locomotive Yarmouth train 43

Excess of speed on atmospheric with similar load 18

It is here seen, that a train of 35 tons—viz: five tons less than the weight which Mr. Stephenson said could be taken at 17 miles per hour only, with 20 in. vacuum, was taken through a three mile section of tube with a

much lower vacuum at 47.36 miles per hour or at 30 miles per hour faster than the maximum fixed by that gentleman. The pistons of both these express trains entered the tube within two minutes after the pistons of the down trains had left it. Speed, easy motion and superior safety are secured by the atmospheric system, and, without going into the question of economy, I would ask, if in addition to what has already been done in its infancy, the atmospheric system can secure regularity with almost innumerable daily trains, who will be bold enough to assign a money value to the public benefits that must, in such case, result from such a realization.

Pennsylvania vs. Nova Scotia Coal.

The correspondent of the Journal of Commerce furnishes that paper with the following memoranda of an experiment, which exhibits a careful estimate, and which will be read with interest—proving, if the test was a fair one, that the anthracites of Pennsylvania are not likely to be so much injured, as some have imagined.

"This experiment," says the journal "was made in 1843, by the great sugar refining company of Boston, for the purpose of directing their own interests. It was made under the superintendence of the president of the company, and the burning of each kind of coal was continued for about a week. The following was the result. The left hand column indicates the quantity of coal used, and the right hand column the quantity of water evaporated—both in pounds.

Lbs. of coal.	Lbs. of water evaporated.
19,022 Lehigh.....	181,177
17,618 Beaver Meadow.....	159,936
18,645 Lackawana.....	167,433
22,903 Sidney and Pictou.....	102,459

"From which it appears that—

1 lb. Lehigh evaporated.....	9 52-100 lbs. water.
1 lb. Beaver Meadow.....	9 08 " "
1 lb. Lackawana.....	8 98 " "
1 lb. Sidney and Pictou.....	4 47 " "

"This experiment proves that the anthracites are worth more than double the same weight of Nova Scotia coal for generating steam, and therefore that the difference in price, if any, is no compensation for the difference in value. The great superiority of the anthracites results not entirely, if chiefly, from the superior quantity of heat which they produce; but in part at least, from the superior facility with which the heat of the anthracites is brought into action. The vast quantities of smoke and gas which are emitted from bituminous coal carry off with them a great quantity of heat, and require the fire to be placed at a greater distance from the boiler, by which a larger volume of air is brought between the fire and the boiler; and as air is a non-conductor, this circumstance embarrasses the heat which remains.

"These facts are full of importance. They account in some measure for the superior speed of American steamers over those of other nations. We are told that this thing has had one most remarkable test. A steamboat was built in Canada after the model of our South America. The builders were disappointed to find after all, that she would run but two-thirds as fast as the South America. Nothing would cure the disparity until Lackawana coal

was taken to her help, and this brought up her speed to the desired point of equality with the pattern boat. If the same change should be effected by the introduction of the same fuel to Atlantic navigation, another new era would astonish the world."

Railroad Iron.

The Yarmouth Register has the following interesting description of the process of manufacturing railroad iron at the Wareham works:

The company is now employed in the manufacture of railroad iron, which is a new business, the first cargo having been shipped from the works on the 12th instant. It is thought that it can be made as cheaply as it can be imported. A gentleman who has recently visited the iron works in England, says there is no establishment in that country at which better railroad iron can be manufactured than at the Tremont works. There are eight furnaces now in operation; and when the works are completed there will be thirteen. The large breast water wheel, attached to the rolling and other machinery, is 25 feet long and 20 feet in diameter.

The first process in the manufacture is called *puddling and blooming*. By these operations the crude pig iron is freed from the oxygen, carbon and other foreign substances, and changed into malleable iron. The pig iron is placed in a *puddling furnace*, where it is raised to a very high temperature. The molten liquid mass is frequently stirred by the workmen with long iron bars inserted into a small opening in the door of the furnace, to facilitate the combination of the carbon and oxygen. After some time the fluidity assumes the consistence of a stiff paste. The doors of the furnace are then opened, and masses of two or three hundred weight are drawn out, and subjected to the action of a heavy tilt hammer, by which a portion of oxide of iron, carbon and other heterogeneous substances not consumed during the fusion, are forced out. The workmen hold and turn the iron under the hammer with long iron bars, which become welded to the half molten mass. This operation is called *blooming*, and the iron, after being subjected to the action of the tilt hammer, blooms.

The second process is *rolling* by which the blooms are converted into bar iron. The blooms are again heated, and passed several times between a pair of heavy cylindrical cast iron rollers, a foot or more in diameter. On the circumference of each of the rollers grooves are cut of the width of the intended bar, and the last of a series of a depth equal to half its thickness. One heat is sufficient to reduce the bloom to a bar. It is first passed through the deepest groove, then passed back over the upper roller, then through the next shallower groove, and so on to the last, which finishes the bar. No force is necessary after the end of the bar is entered; the friction of the rollers draws the bar through.

For railroad iron the bars are rolled down to one inch in thickness; one-third are six inches wide, and two-thirds, three inches. The bars are cut into pieces four feet long by machinery. A six inch bar of cold iron is

clipped off in an instant. These pieces are piled into bundles consisting of three six-inch, and six three-inch pieces, one of the six-inch bars being iron that has been rolled twice. This forms the lower part of the rail, for the iron must be of the best quality, or the flanges which are only one-fourth of an inch, are liable to be cracked in rolling.

These bundles are placed in a furnace, and their temperature raised to a welding heat. They are then taken out and passed several times through a pair of rollers similar to those above described, excepting that the grooves are cut in the form required for the shape of the rail. The whole operation of rolling out a rail is performed in two minutes and ten seconds, a much less time than it would require to give an intelligible description. The rails are cut by circular saws, 18 feet 3½ inches long; but are only 18 feet long when cool. The rails are placed on a surface having three inches curve, and when cool, they are nearly straight. Each rail is carefully examined, and if any flaw or imperfection is found, it is repaired. The last operation is making them perfectly straight by means of a long lever. They are then piled and stuck, like so many boards in a lumber yard.

The rails when piled, are straight, smooth and free from flaws. The iron is of the best quality. We heard those who were judges of the article say, that none better had ever been manufactured. The company are now making twelve tons per day, and when the furnaces are all in operation, twenty tons will be manufactured each day.

Wabash and Erie Canal.

The Toledo Blade gives the following account of the business upon this canal.

The business of this noble channel of commerce is augmenting so fast that fears are entertained of a deficiency of water on Fort Wayne level. Already this deficiency is manifest, while the country has but begun to give forth the means of commerce. This level has not, for a portion of the present season, been kept as full as easy navigation required. The feeder from the St. Joseph, brought in upon it, is relied upon to supply a long line of canal east and west. This is found insufficient even for the present business. An additional supply must be provided forthwith. Our fall business, it is apprehended, will suffer for want of this supply. We would, therefore invite the prompt attention of the proper officers in Indiana and Ohio to this subject. The income from the canal is rapidly augmenting, and both states need all that it can be made to produce.

On the part of Ohio we can anticipate no want of the proper care of this matter from the present board of public works. Whatever provision shall be found necessary, and within their province, to make our public works productive to the state, and most useful to the public, they will be found prompt in making.

It is suggested by the Fort Wayne Times that a sufficient supply may be provided by making a reservoir and feeder on the St. Mary's. This should be examined into without

delay. Such a feeder would add to the business of the canal, while it would supply it with water.

A co-operation of the officers of Ohio and Indiana, in charge of the work, will probably be required for the adoption of the best plan; and no time should be lost in bringing about that co-operation.

A Railroad Dinner.

A traveller in England gives the following sketch of a railroad dinner in that country, to which, by the regulations of the road, exactly thirty minutes are allowed.

"To any one who had seen Englishmen dine only at leisure, it would really seem impossible that they should dine at all in half an hour. But they do it as effectually as could be done in any country. In a large hall we found a *table d'hôte*, spread pretty much in American style, and the seats were taken possession of by a very hungry army of occupation in less than one minute. Woe to the waiters! An American army would first have devoured what was before them, but this British one first devoured the waiters. They were called to pieces, went every way and brought nothing. The diners, seeing there was no more to be made of them, fell upon the viands actually before them in desperation, and fully made up for lost time. Saddles of mutton and legs of pork disappeared by magic, and a great extent of pastry vanished like dew, before the bell rang."

Interesting Facts.

The Detroit Advertiser in an article upon the nature of the *ores* in the lake Superior region, remarks that Messrs. Robbins and Hubbard, of that city, have recently assayed a specimen of native copper from lake Superior, and found in 12 ounces of copper, not only 14 ounces of pure silver, but several grains of gold! Those who are curious can see the several metals, as separated, at Messrs. Robbins and Hubbard's store.

The Lake Superior News extracts the above, and adds as follows:

"We copy the above from the Detroit Advertiser, of the 28th ult., and while some of our friends seem skeptical as to the reported result of the assay, we must be permitted to state that we can see no reason why it should not be true. Aside from the known character and integrity of Messrs. Robbins and Hubbard as assayers, the fact that the mineral of this region presents an entire originality, and is found differing from all other mining sections of the world, is sufficient to lead us to adopt the opinion that gold even *may* be found mingled with the *copper*, and that too, without 'exciting our special wonder.' For the purpose of arriving at correct conclusions, mere reasoning by analogy with regard to the mineral developments of the lake Superior country need hardly be attempted, and cannot safely be relied upon. Yet, while ourself would bear this principle in mind, which we have hinted for those who sneer at almost every development made in our mineral region, and who attempt to disprove the facts simply by analogy, we would beg to remind them that the Ural mountains, so famous for rich copper, possess also remarkable deposits of gold. The mine of Beresof,

for instance, about three leagues northeast of Ekaterinbourg, on the Asiatic side, and north even of the 50th degree of latitude, contains five parts of native gold in 100,000—its deposit constituting a large vein, running from north to south, and from which 500 marcs of gold have been taken out in a single year! Again: according to Bergman, the copper of the Andes is chiefly obtained from veins, (in blue argillite, it is true,) but generally accompanied with gold, silver, lead and iron, all of which, with the exception of gold, it will be readily admitted by every one, are found within the region of lake Superior.

We might witness more instances, where gold has been contiguous or accompanied with copper and the baser metals, but we have already said more on the subject than we had intended. When we commenced, we designed simply to state our settled opinion, fortified somewhat by many in the scientific field that gold may and does exist, more or less, among the ores of this region. To use the emphatic language of a learned friend in mineralogy, who has thoroughly studied their character, we are prepared to witness in the district of lake Superior, without the excitement of further wonder, the rarest and most profuse developments of mineral wealth that ever astonished the eyes of man."

Coal.—The Philadelphia Inquirer states that the total amount of coal shipped from the various regions in that state during the present season, up to the latest dates, has been 1,427,467 tons.

RAILROAD IRON.—THE SUBSCRIBER'S New Rail Iron Mill at Phoenixville, Pa., is expected to be ready to go into operation by the 1st of September, and will be capable of turning out 30 to 40 tons or finished Rails per day. They are now prepared to receive orders to that extent, deliverable after the 1st of October next, for heavy rails of any pattern now in use, equal in quality and finish to best imported.

PIG IRON.—They are also receiving weekly 150 to 200 tons of No. 1 Phoenix Foundry Iron, well adapted for light castings.

REEVES, BUCK & CO,
45 North Water St., Philadelphia,
or by their Agent, ROBT. NICHOLS,
79 Water St., New York.

RAILROAD IRON.—THE NEW JERSEY Iron Company, Boonton, N. J., are now preparing to make Railroad Bars, and are ready to take orders or make contracts for Rails, deliverable after the first of December next. Apply to

FULLER & BROWN, Agent,
No. 139 Greenwich, corner of Cedar street.
September 18, 1846. 10:39

TO RAILROAD COMPANIES AND MANUFACTURERS of railroad Machinery. The subscribers have for sale Am. and English bar iron, of all sizes; English blister, cast, shear and spring steel; Juniata rods; car axles, made of double refined iron; sheet and boiler iron, cut to pattern; tiers for locomotive engines, and other railroad carriage wheels, made from common and double refined B. O. iron; the latter a very superior article. The tires are made by Messrs. Baldwin & Whitney, locomotive engine manufacturers of this city. Orders addressed to them, or to us, will be promptly executed.

When the exact diameter of the wheel is stated in the order, a fit to those wheels is guaranteed, saving to the purchaser the expense of turning them out inside. THOMAS & EDMUND GEORGE,
No. 45 N. E. cor. 12th and Market sts., Philad., Pa.

RAILROAD IRON AND LOCOMOTIVE Tyres imported to order and constantly on hand by
A. & G. RALSTON
Mar. 20th 4 South Front St., Philadelphia.

Valuable Works on Engineering for Sale.

The following works, belonging to the late Wm. R. Casey, have been deposited at this office for sale. It will be seen that they comprise most of the standard books. The reports and non-enumerated pamphlets are however among the best part of the collection, as many of them are not to be found or purchased at any price. So desirable an opportunity seldom offers for securing an excellent set of professional works.

LIST OF ENGINEERING BOOKS BELONGING TO W. R. CASEY, deceased.

- 1.—The Civil Engineer and Architect's Journal, quarto, vols. 1, 2, 4, 5 and 6, and nos. 79 to 81, and 84 to 95—remaining numbers expected from Montreal, Canada.
- 2.—Railroad Journal, quarto, vols. 1, 2, 3; octavo, vols. 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17; octavo vols. 18, and loose nos. to date; being nearly a complete set.
- 3.—Reports and Documents, 6 or 7 octavo vols.
- 4.—Tredgold's Carpentry, quarto, with plates.
- 5.—Barlow on Strength and Stress of Timber, octavo, with plates.
- 6.—Turnbull on Iron, octavo.
- 7.—Nicholson's Masonry and Stone Cutting, octavo, with plates.
- 8.—Tredgold's Tracts on Hydraulics, octavo, with plates.
- 9.—Gregory's Mathematics for Practical Men, octavo, with plates.
- 10.—Wood on Railroads, octavo.
- 11.—Pambour on Locomotives, octavo, with plates, (Philadelphia edition.)
- 12.—Lecount on Railroads, octavo, with plates.
- 13.—Smeaton's Tracts, 1796, octavo, with plates.
- 14.—Seward's New London Bridge, octavo, with plates.
- 15.—Storow's Treatise on Water Works, duodecimo.
- 16.—Report on Atmospheric Railway, etc., quarto, with plates.
- 17.—Gallier's Price Book and Estimator, octavo.
- 18.—Public Works of Great Britain, folio, \$25.
- 19.—Weale's Bridges, new and valuable, \$23.

The above books will be sold by the single volume, if desired, and forwarded by express, or otherwise, as directed by the purchaser.

Please address E. HEDGE, Railroad Journal Office, 36th 23 Chambers street, New York.

RAILROAD SCALES.—THE ATTENTION of Railroad Companies is particularly requested to Ellicott's Scales, made for weighing loaded cars in trains, or singly, they have been the inventors, and the first to make platform scales in the United States; supposing that an experience of 20 years has given a knowledge and superior advantage in the business.

The levers of our scales are made of wrought iron, all the bearers and fulcrums are made of the best cast steel, laid on blocks of granite, extending across the pit, the upper part of the scale only being made of wood. E. Ellicott has made the largest Railroad Scale in the world, its extreme length was one hundred and twenty feet, capable of weighing ten loaded cars at a single draft. It was put on the Mine Hill and Schuylkill Haven Railroad.

We are prepared to make scales of any size to weigh from five pounds to two hundred tons.

ELLICOTT & ABBOTT.
Factory, 9th street, near Coates, cor. Melon st.
Office, No. 3 North 5th street,
Philadelphia, Pa.

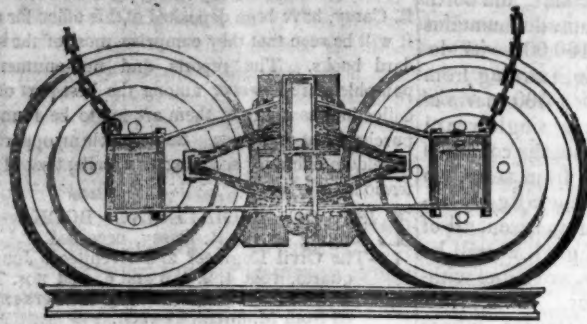
LAWRENCE'S ROSENDALE HYDRAULIC Cement. This cement is warranted equal to any manufactured in this country, and has been pronounced superior to Francis' "Roman." Its value for Aqueducts, Locks, Bridges, Floors and all Masonry exposed to dampness, is well known, as it sets immediately under water, and increases in solidity for years.

For sale in lots to suit purchasers, in tight paper-barrels, by JOHN W. LAWRENCE,
142 Front street, New York.

Orders for the above will be received and promptly attended to at this office. 32 17

RAY'S EQUALIZING RAILWAY TRUCK.—THE SUBSCRIBER

bar having recently formed a business connection in the City of New



York, expressly for the manufacture of the newly patented and highly approved Railroad Truck of Mr. Fowler M. Ray, is ready to receive orders for building the same, from Railroad Companies and Car Builders in the United States, and elsewhere.

The above Truck has now been in use from one to two years on several roads a sufficient length of time to test its durability, and other good qualities, and to satisfy those who have used it, as may be seen by reference to the certificates which follow this notice.

There have been several improvements lately introduced upon the Truck, such as additional springs in the bolster of passenger cars, making them delightful riding cars—adapting it to tenders, trucks forward of the locomotive, and freight cars, which, with its original good qualities, make it in all respects the most desirable truck now offered to the public.

Orders for the above, will, for the present, be executed at the New York Screw Mill, corner 33d street and 3d avenue, (late P. Cooper's rolling mills) and at the Steam Engine Shop of T. F. Secor & Co., foot of 9th street, East

river, (of which firm the subscriber was late a partner) under the immediate supervision of Mr. Ray himself.

Several sets of trucks containing the latest improvements have recently been turned out for the New York and Erie railroad, and the New Jersey Transportation company, which may be seen upon said roads.

The patronage of Railroad Companies and Car Builders is respectfully solicited.

New York, May 4, 1846.

W. H. CALKINS, and Others.

To all whom it may concern:—This is to certify that the New Haven, Hartford and Springfield railroad co., have had in use six sets of F. M. Ray's patent trucks for the last 20 months, during which time it appears to me, they have proved to be the best and most economical truck now in use.

[Signed,]

WILLIAM ROE, Supt of Power.

I certify that F. M. Ray's Patent Equalizing Railroad Truck has been in use on the Philadelphia and Reading railroad for some time past, under a passenger car.

For simplicity of construction, economy in cost, lightness of material, and extreme ease of motion, I consider it the best truck we have ever used. Its peculiar make also renders it less liable to be thrown off the track, when passing over any obstruction. We intend using it extensively under the passenger and freight cars of the above road.

Reading, Pa., October 6, 1845.

[Signed,] G. A. NICOLI,

Supt Transportation, etc., Philadelphia and Reading Railroad.

To all whom it may concern:—This is to certify that the N. Jersey Railroad and Transportation company have used Fowler M. Ray's Truck for the last seven months, during which time it has operated to our entire satisfaction. I have no hesitation in saying that it is the simplest and most economical truck now in use.

[Signed,] T. L. SMITH,

Jersey City, November 4, 1845.

N. Jersey Railroad and Transp. Co.

This is to certify that F. M. Ray's Patent Equalizing Railroad Truck has been in use on the Long Island railroad for the last year, under a freight car. For simplicity of construction, economy in cost, lightness of material and ease of motion, I consider it equal to any truck we have in use.

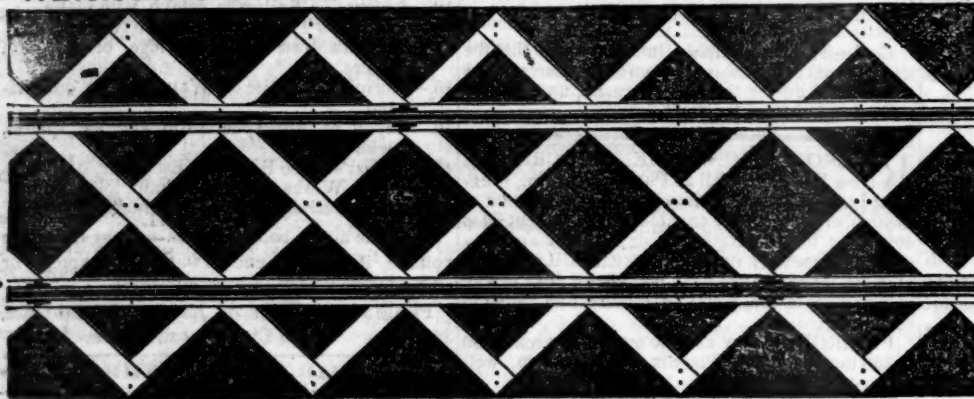
Long Island Railroad Depot,

[Signed,] JOHN LEACH,

Jamaica November 12, 1845.

Supt Motive Power.

HERRON'S PATENT AMERICAN RAILWAY TRACK,



As seen stripped of the top ballasting

HERRON'S IMPROVEMENTS IN RAILWAY SUPERSTRUCTURE effect a large aggregate saving in the working expenses, and maintenance of railways, compared with the best tracks in use. This saving is effected—1st, Directly by the amount of the increased load that will be hauled by a locomotive, owing to the superior evenness of surface, of line and of joint. This gain alone may amount to 20 per cent. on the usual load of an engine.—2d, In consequence of the thorough combination, bracing, and large bearing surface of this track, it will be maintained in a better condition than any other track in use, at about one-third the expense.—3d, As action and reaction are equal, a corresponding saving of about two-thirds will be effected in the wear and tear of the engines and cars, by the even surface and elastic structure of the track.—4th, The great security to life, and less liability to accident or damage, should the engine or cars be thrown off the rails.—5th, The absence of jar and vibration, that shake down retaining walls, embankments and bridges.—6th, The great advantage of the high speed that may be safely attained, with ease of motion, reduction of noise, and consequently increased comfort to the traveller.—7th, The really permanent and perfect character of the Way, insuring regularity of transit. To which may be added the great increase of travel, that would be induced by the foregoing qualities to augment the revenue of the railroad.

The cost of the Patent track will depend on the quantity and cost of iron and other materials; but it will not exceed, even including the preservation of the timber, the average cost of the tracks on our principal railroads. Generally, the timber structure, fastenings and workmanship, exclusive of the cost of the iron rails, will be from \$2,300 to \$4,000 per mile. On this structure, rails of from 40 to 60 lbs. per yard, will be equal in effect to

60 and 70 lbs. rails laid in the usual way. The proprietors of a road, furnishing approved materials in the first instance, the undersigned will construct the track on his plan in the most perfect manner, with recent improvements, for one thousand dollars per mile. And he will further contract to maintain said track for the period of ten years, furnishing such preserved timber and iron fastenings as may be required, and keeping said track in perfect adjustment, under any trade not exceeding 100,000 tons per annum, or its equivalent in passenger transportation, for Two hundred dollars per mile per annum.* To insure the faithful performance of this contract, he will pledge one-fourth the cost of construction, with the accruing interest thereon, regularly vested, until the completion of the contract. So that a company, by securing payment to the undersigned at the specified period, will have only \$750 per mile to pay for the workmanship on the track, without any charge being made for the use of the patent, the subsequent payments, for maintenance of way, and amount withheld, being made from the large margin of profits that will result from its use.

JAMES HERRON.

Civil Engineer and Patentee.

No. 277 South Tenth St., Philadelphia.

* A general average of the repairs done on six of the most successful railroads in this country, for a period of from six to eight years' use has been found to exceed \$625 per mile per annum, exclusive of renewal of rails. But few roads in this country carry as much as 100,000 tons per annum. When a road exceeds that quantity, the repairs due to the additional tonnage, up to 200,000 tons, will be charged at one mill per ton; over the latter, and not exceeding 300,000 tons, nine-tenths of a mill, etc. Where there are two tracks to maintain, a large reduction upon those rates will be made.

THE AMERICAN RAILROAD JOURNAL is the only periodical having a general circulation throughout the Union, in which all matters connected with public works can be brought to the notice of all persons in any way interested in these undertakings. Hence it offers peculiar advantages for advertising times of departure, rates of fare and freight, improvements in machinery, materials, as iron, timber, stone, cement, etc. It is also the best medium for advertising contracts, and placing the merits of new undertakings fairly before the public.

RATES OF ADVERTISING.

One page per annum.....	\$125 00
One column ".....	50 00
One square ".....	15 00
One page per month.....	20 00
One column ".....	8 00
One square ".....	2 50
One page, single insertion.....	8 00
One column ".....	3 00
One square ".....	1 00
Professional notices per annum....	5 00

ENGINEERS and MACHINISTS.

THOMAS PROSSER, 28 Platt St. N.Y. (See Adv.)
J. F. WINSLOW, Albany Iron and Nail Works, Troy, N. Y. (See Adv.)
TROY IRON AND NAIL FACTORY, H. Burden, Agent. (See Adv.)
ROGERS, KETCHUM AND GROSVENOR, Patterson, N. J. (See Adv.)
S. VAIL, Speedwell Iron Works, near Morristown, N. J. (See Adv.)
NORRIS, BROTHERS, Philadelphia Pa. (See Adv.)
KITE'S Patent Safety Beam. (See Adv.)
FRENCH & BAIRD, Philadelphia, Pa. (See Adv.)
NEWCASTLE MANUFACTURING COMPANY, Newcastle, Del. (See Adv.)
ROSS WINANS, Baltimore, Md.
CYRUS ALGER & Co., South Boston Iron Company.
SETH ADAMS, Engineer, South Boston
STILLMAN, ALLEN & Co., N. Y.
JAS. P. ALLAIRE, N. Y.
PHENIX FOUNDRY, N. Y.
ANDREW MENEELY, West Troy.
JOHN F. STARR, Philadelphia, Pa.
MERRICK & TOWNE, do.
HINCKLEY & DRURY, Boston.
C. C. ALGER, Stockbridge Iron Works, Stockbridge, Mass.



RICH & CO'S IMPROVED PATENT SALAMANDER SAFES.

Warranted free from dampness, as well as fire and thief proof.

Particular attention is invited to the following certificates, which speak for themselves:

TEST No. 10.

Certificate from Mr. Silas C. Field, of Vicksburg, Mississippi.

On the morning of the 14th ult., the store owned and occupied by me in this city, was, with its contents, entirely consumed by fire. My stock of goods consisted of oil, rosin, lard, pork, sugar, molasses, liquors, and other articles of a combustible nature, in the midst of which was one of Rich's Improved Patent Salamander Safes, which I purchased last October of Mr. Isaac Bridge, New Orleans, and which contained my books and papers. This safe was red hot, and did not cool sufficiently to be opened until 16 hours after it was taken from the ruins. At the expiration of that time it was unlocked, when its contents proved to be entirely uninjured, and not even discolored. I deem this test sufficient to show that the high reputation enjoyed by Rich's Safes is well merited.

S. C. FIELD.

Vicksburg, Miss., March 9th, 1846.

Certificate from Judge Battaile, of Benton, Mississippi.

In October last I purchased one of Rich's Improved Salamander Safes, which was in the fire at the burning of my law office, and several adjoining buildings in this place, on the 17th of November last, at about half-past one o'clock A. M. of that day. The building was entirely consumed; and I take pleasure in stating that my papers in said safe were preserved, without injury. A receipt book which was in said safe, had the glue drawn out of its leather back by the heat, and the back broken; but the leaves of the book, and the writing thereon, were entirely uninjured; and some of the writing which was of blue ink, was also left wholly uneffaced and not in the least faded. Said safe was by the fire heated perfectly red hot, and I do not hesitate to say, that said safe is a perfect security against fire. But the safe tumbled over during the fire, and being heated red hot, the outer sheeting of the door became pressed in, and the bolts of the lock bent, so that it could not be unlocked, and I had to have it broken open.

JOHN BATTAILLE.

Benton, Miss., December 27, 1845.

Still other Tests in the Great Fire of July 19, 1845.

The undersigned purchased of A. S. Martin, No. 138½ Water street, one of Rich's Improved Patent Salamander Safes, which was in our store, No. 54 Exchange place. The store was entirely consumed in the great conflagration on the morning of the 19th inst. The safe was taken from the ruins 52 hours after, and on opening it, the books and papers were found entirely uninjured by fire, and only slightly wet—the leather on some of the books was parched by the extreme heat.

RICHARDS & CROCKFORD.

New York, 21st July, 1845.

One of Rich's Improved Salamander Safes, which I purchased on the 2d of June last of A. S. Marvin, 138½ Water street, agent for the manufacturer, was exposed to the most intense heat during the late dreadful conflagration. The store which I occupied, No. 46 Broad street, was entirely consumed; the safe fell from the 2d story, about 15 feet, into the cellar, and remained there 14 hours, and when found, I am told, and from its appearance afterwards, should judge that it had been heated to a red heat. On opening it, the books and papers were found not to have been touched by fire. I deem this ordeal sufficient to confirm fully the reputation that Rich's safe has already obtained for preserving its contents against all hazards.

(Signed.)

WM. BLOODGOOD.

New York, 21st July, 1845.

The above safes are finished in the neatest manner, and can be made to order at short notice, of any size and pattern, and fitted to contain plate, jewelry, etc. Prices from \$50 to \$500 each. For sale by

A. S. MARVIN, General Agent,

138½ Water st., N. Y.

Also by Isaac Bridge 76 Magazine street, New Orleans.

Also by Lewis M Hatch, 130 Meeting street Charleston, S. C.

16 tf

FRENCH AND BAIRD'S PATENT SPARK ARRESTER.

TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved SPARK ARRESTER, recently patented by the undersigned.

Our improved Spark Arresters have been extensively used during the last year on both passenger and freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air, smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own gravity to the bottom of this chamber; the smoke and steam passing off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits:

R. L. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendent Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendent Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburg and Jackson Railroad, Vicksburg, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. M'Kee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich.; G. B. Fisk, President Long Island Railroad, Brooklyn.

Orders for these Chimneys and Arresters, addressed to the subscribers, care Messrs. Baldwin & Whitney, of this city or to Hinckly & Drury, Boston, will be promptly executed.

N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms.

Philadelphia, Pa., April 6, 1844.

*** The letters in the figures refer to the article given in the Journal of June, 1844. ja45

PATENT HAMMERED RAILROAD, SHIP and Boat Spikes. The Albany Iron and Nail Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes, from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscriber at the works, will be promptly executed.

JOHN F. WINSLOW, Agent.

Albany Iron and Nail Works, Troy, N. Y. The above spikes may be had at factory prices, of Erastus Corning & Co., Albany; Hart & Merritt, New York; J. H. Whitney, do.; E. J. Etting, Philadelphia; Wm. E. Coffin & Co., Boston. ja45

MACHINE WORKS OF ROGERS, Ketchum & Grosvenor, Patterson, N. J. The undersigned receive orders for the following articles, manufactured by them of the most superior description in every particular. Their works being extensive and the number of hands employed being large, they are enabled to execute both large and small orders with promptness and despatch.

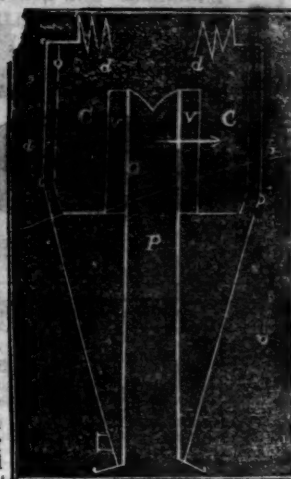
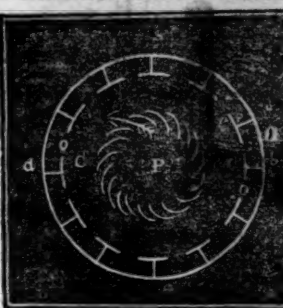
Railroad Work.

Locomotive steam engines and tenders; Driving and other locomotive wheels, axles, springs & flange tires; car wheels of cast iron, from a variety of patterns, and chills; car wheels of cast iron with wrought tires; axles of best American refined iron; springs; boxes and bolts for cars.

Cotton, Wool and Flax Machinery of all descriptions and of the most improved patterns, style and workmanship.

Mill gearing and Millwright work generally; hydraulic and other presses; press screws; callenders; lathes and tools of all kinds; iron and brass castings of all descriptions.

ROGERS, KETCHUM & GROSVENOR, a45 Paterson, N. J., or 60 Wall street, N. York.



PATENT RAILROAD, SHIP AND BOAT Spikes. The Troy Iron and Nail Factory keeps constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years' successful operation, and now almost universal use in the United States (as well as England, where the subscriber obtained a patent) are found superior to any ever offered in market.

Railroad companies may be supplied with Spikes having countersink heads suitable to holes in iron rails, to any amount and on short notice. Almost all the railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invaluable, as their adhesion is more than double any common spikes made by the hammer.

All orders directed to the Agent, Troy, N. York, will be punctually attended to.

HENRY BURDEN, Agent.

Spikes are kept for sale, at Factory Prices, by I. & J. Townsend, Albany, and the principal iron merchants in Albany and Troy; J. I. Brower, 222 Water St., New York; A. M. Jones, Philadelphia; T. Janviers, Baltimore; Degrand & Smith, Boston.

*** Railroad Companies would do well to forward their orders as early as practicable, as the subscriber is desirous of extending the manufacturing so as to keep pace with the daily increasing demand. ja45

DAVENPORT & BRIDGES CONTINUE to Manufacture to Order, at their Works, in Cambridgeport, Mass., Passenger and Freight Cars of every description, and of the most improved pattern. They also furnish Snow Ploughs and Chilled Wheels of any pattern and size. Forged Axles, Springs, Boxes and Bolts for Cars at the lowest prices. All orders punctually executed and forwarded to any part of the country.

Our Works are within fifteen minutes ride from State street, Boston—coaches pass every fifteen minutes.

ly)

ENGINEERS' AND SURVEYERS'
INSTRUMENTS MADE BY
EDMUND DRAPER,
Surviving partner of
STANCLIFFE & DRAPER.

No 23 Pear street,
1y10 near Third,
below Walnut,
Philadelphia.

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

PASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to 1 in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T, L, and other fixtures to suit, fitting together, with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER FLUES.



Manufactured and for sale by
MORRIS, TASKER & MORRIS.
Warehouse S. E. Corner of Third & Walnut Streets,
PHILADELPHIA.

**LAP—WELDED
WROUGHT IRON TUBES**

FOR

**TUBULAR BOILERS,
FROM 1 1/4 TO 6 INCHES DIAMETER,
and**

ANY LENGTH, NOT EXCEEDING 17 FEET.

These Tubes are of the same quality and manufacture as those so extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER,
Patentee.

1y25 28 Platt street, New York.

THE SUBSCRIBERS, AGENTS FOR
the sale of

Codorus,
Glendon,
Spring Mill and
Valley, } Pig Iron.

Have now a supply, and respectfully solicit the patronage of persons engaged in the making of Machinery, for which purpose the above makes of Pig Iron are particularly adapted.

They are also sole Agents for Watson's celebrated Fire Bricks and prepared Kaolin or Fire Clay, orders for which are promptly supplied.

SAM'L. KIMBER, & CO.,

59 North Wharves,
Jan. 14, 1846. [1y4] Philadelphia, Pa.

PATENT INDESTRUCTIBLE WATER

Pipes. The subscribers continue to manufacture the above Pipes, of all the sizes and strength required for City or Country use, and would invite individuals or companies to examine its merits.—This pipe, unlike cast iron and lead, imparts neither color, oxide or taste, being formed of strongly riveted sheet iron, and evenly lined on the inside with hydraulic cement. While in the process of laying, it has a thick covering externally of the same—thus forming nature's own conduit of stone. The iron being thoroughly enclosed on both sides with cement, precludes the possibility of rust or decay, and renders the pipe truly indestructible. The prices are less than those of iron or lead. We also manufacture Basins and D. Traps, for Water Closets, on a new principle, which we wish the public to examine at 112 Fulton street, New York.

29th

J. BALL & CO.

ENGLISH PATENT WIRE ROPES—FOR THE USE OF MINES, RAILWAYS, ETC.—

for sale or imported to order by the subscriber.

These Ropes are manufactured on an entirely different principle from any other, and are now almost exclusively used in the collieries and on the railways in Great Britain, where they are considered to be greatly superior to hempen ones, or iron chains, as regards safety, durability and economy. The plan upon which they are made effectually secures them from corrosion in the interior, as well as the exterior of the rope, and gives a greater compactness and elasticity than is found in any other manufacture.

Many of these ropes have been in constant operation in the different mines in England, and on the Blackwall and other inclined planes, for three and four years, and are still in good condition.

They have been applied to almost every purpose for which hempen ropes have been used—mines, heavy cranes, standing rigging, window cords, lightning conductors, signal halyards, tiller ropes, etc. Reference is made to the annexed statement for the relative strength and size. Testimonials from the most eminent engineers in England can be shown as to their efficiency, and any additional information required respecting the different descriptions and application will be given by

ALFRED L. KEMP,

75 Broad street, New York, sole agent in the United States.

Statement of Trial made at the Woolwich Royal Dock Yard, of the Patent Wire Ropes, as compared with Hempen Ropes and Iron Chains of the same strength.—October, 1841.

WIRE ROPES.			HEMPEN ROPES.			CHAINS.		STRENGTH Tons.
Wire gauge number.	Circumference of rope.	Weight per fathom.	Circumference of rope.	Weight per fathom.	Weight per fathom.	Diameter of iron.		
	INCH.	LBS. OZ.	INCH.	LBS. OZ.	LBS.	INCH.		
11	4 1/2	13 5	10	24 -	50	15-16		20
13	3 1/2	8 3	8 1/2	16 -	27	11-16		13 1/2
14	3 1/4	6 11	7 1/2	12 8	17	9-16		10 1/2
15	2 1/2	5 2	6 1/2	9 4	13 1/2	1-2		7 1/2
16	2 1/4	4 3	6	8 8	10 1/2	7-16		7

N.B. The working load, with a perpendicular lift, may be taken at 6 cwt. for every lb. weight per fathom, so that a rope weighing 5 lbs. per fathom would safely lift 3360 lbs., and so on in proportion. 1y24

NICOLL'S PATENT SAFETY SWITCH
for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design.

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them.

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable.

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York.

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee
G. A. NICOLLS,
Reading, Pa.

ja45

TYLER'S PATENT SAFETY SWITCH.
The following decision of the Commissioners of Patents is respectfully submitted to Railroad Engineers, Superintendents, and all others interested in the subject.

(COPY.)

UNITED STATES PATENT OFFICE,
Washington City, D. C., April 28th, 1846.

SIR: You are hereby informed that in the case of the interference between your claims and those of Gustavus A. Nicolls, for improvements in safety switches—upon which a hearing was appointed to take place on the 3rd Monday in March, 1846, the question of priority of invention has been decided in your favor. Inclosed is a copy of the decision.—The testimony in the case, is now open to the inspection of those concerned. Yours Respectfully,

EDMUND BURK,
Commissioner of Patents.

To Philos B. Tyler.

Any further information may be obtained by addressing John Pendleton, Agent for the Proprietor 149 Hudson Street, New York. 1m39

TO LOCOMOTIVE AND MARINE ENGINE BOILER BUILDERS. Pascal Iron Works, Philadelphia. Welded Wrought Iron Flues, suitable for Locomotives, Marine and other Steam Engine Boilers, from 2 to 5 inches in diameter. Also, Pipes for Gas, Steam and other purposes; extra strong Tube for Hydraulic Presses; Hollow Pistons for Pumps of Steam Engines, etc. Manufacture! and for sale by

MORRIS TASKER & MORRIS,
Warehouse S. E. corner 3d and Walnut Sts., Philadelphia

OFFICE NEW YORK AND ERIE RAILROAD CO.,
45 Wall Street, New York, Aug. 28, 1846.

NOTICE IS HEREBY GIVEN, THAT PROPOSALS will be received until the 13th day of October next, for the Grading, Masonry and Bridging required to complete that portion of the New York and Erie Railroad between a point three miles east of Port Jervis in Orange county, and the village of Binghamton in Broome county, a distance of about 133 miles.

Maps and profiles, estimates and specifications, will be found after the 10th of September in the office of the company, at New York city, where every necessary information will be given. The engineers on the line of the road will also furnish all requisite facilities to contractors desirous of examining the route.

The line will be divided into sections of convenient length for construction, and proposals in writing will be received at the New York office for the whole or any part of the work. By order of the President and Directors.

6:36 **T. S. BROWN,** Chief Engineer.

NOTICE TO CONTRACTORS.—BOSTON,
Concord and Montreal Railroad Company.—

This company is now ready to contract for the grading and masonry of said road, or any portion thereof, south of Meredith Bridge, with the exception of two miles immediately north of Merrimack River. They are ready, likewise, to contract for sleepers, and lumber for fencing said road from Concord to Meredith Bridge. Any proposals for grading masonry, sleepers, or fencing, may be left with Theodore French, Esq., Treasurer of said company, at his office in Concord, and it will receive due attention.

PETER CLARK, Agent.

Concord, September 2, 1846. 3:39

A. & G. RALSTON & CO., NO. 4

South Front St., Philadelphia, Pa.

Have now on hand, for sale, Railroad Iron, viz: 180 tons 2 1/4 x 1/2 inch Flat Punched Rails, 20 ft. long. 25 " 2 1/4 x 1/2 " Flange Iron Rails. 75 " 1 x 1/2 " Flat Punched Bars for Drafts in Mines. A full assortment of Railroad Spikes, Boat and Ship Spikes. They are prepared to execute orders for every description of Railroad Iron and Fixtures. 1lf

SPRING STEEL FOR LOCOMOTIVES,
Tenders and Cars. The Subscriber is engaged in manufacturing Spring Steel from 1 1/4 to 6 inches in width, and of any thickness required: large quantities are yearly furnished for railroad purposes, and wherever used, its quality has been approved. The establishment being large, can execute orders with great promptitude, at reasonable prices, and the quality warranted. Address

JOAN F. WINSLOW, Agent,
Albany Iron and Nail Works,